UNITED STATES DEPARTMENT OF COMMERCE
National Telecommunications and Information Administration
Washington, D.C. 20230

May 18, 2009

Ms. Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street, S.W.
Suite TW-A325
Washington, DC 20554

RE: Report on Rural Broadband Strategy, GN Docket No. 09-29

Dear Ms. Dortch:

Enclosed please find five copies of the federal agency responses to the Federal Communications Commission's rural broadband survey in the above-referenced proceeding. The information contained in the enclosures was transmitted electronically on April 12, 2009, and April 20, 2009, to Julie Veach, Acting Bureau Chief of the Wireline Competition Bureau; Renee Crittendon, Acting Deputy Chief of the Wireline Competition Bureau; and Scott Deutchman, Competition and Universal Service Legal Advisor for Acting Chairman Michael Copps. Please direct any questions you may have to the undersigned at (202) 482-1816.

Respectfully submitted,

Kathy D. Smith
Chief Counsel

enclosures

Federal Agency Responses to FCC Questionnaire
Report on Rural Broadband Strategy, GN Docket No. 09-29

Question 1: Please list and describe your agency's rural programs.

Department of Health and Human Services

I. Agency for Healthcare Research and Quality (AHRQ) – Contact: Erin Grace, Erin.Grace@AHRQ.hhs.gov; (301) 427-1580

AHRQ considers those living in rural areas to be a priority population. As such, the agency prioritizes health services research focused on improving the quality, safety, efficiency and effectiveness of health care for rural Americans. In 2004/2005, AHRQ's health information technology (IT) portfolio included funding that was specifically set aside for researching the impact of health IT in rural and underserved areas. Additional information on AHRQ's health services research in rural areas can be found at http://www.ahrq.gov/research/ruralix.htm. Information on health IT research projects in rural areas can be found on the health IT website at www.healthit.ahrq.gov.

II. Indian Health Service (IHS) – Contact: Theresa Cullen, Theresa.Cullen@ihs.gov, (301) 443-9848

The Indian Health Service (IHS) is an agency within the Department of Health and Human Services (HHS). The IHS provides a comprehensive health service delivery system for approximately 1.9 million of the nation's estimated 3.3 million American Indians and Alaska Natives. Indian health care services are provided in over 700 IHS and tribal health care facilities including 45 hospitals, 303 health centers, 132 health stations, and 166 Alaska village clinics scattered throughout 36 states, mostly in rural and isolated areas. For most Indian people, IHS-supported programs are the only source of health care. No alternative sources of medical care are available in many cases, especially in isolated areas. The following link provides IHS and tribal facility locations within each of the 12 IHS Areas, or geographical regions: http://www.ihs.gov/index.cfm?module=AreaOffices

III. Health Resources and Services Administration (HRSA); Contact: Dena Pushkin, DPuskin@hrsa.gov; (301) 443-3682

HRSA administers many programs that address rural barriers to health care and the raised in this questionnaire. Some programs are directed at educating health professionals, while others may be addressing specialized populations, such as persons living with HIV or mothers and children. Others are directed to building the infrastructure for health systems or services, such as our community health center grant programs. Given time constraints, we were not able to catalog all of them for this response. However, the vast majority of these programs are described on our website: http://www.hrsa.gov. We have instead chosen to focus on two components of HRSA – The Office for the Advancement of Telehealth (OAT) in our Office of Health Information Technology (OHIT) and our Office of Rural Health Policy (ORHP). Both of these offices administer programs that are particularly relevant to this questionnaire.

A. Office of Health Information Technology/Office for the Advancement of Telehealth

The Office of Health Information Technology works to promote the cost-effective use of health information technology in underserved communities. Organizationally, it contains three divisions: 1) The Office for the Advancement of Telehealth (OAT); 2) The Division of State and Community Assistance (DSCA); 3) Division of HIT Policy. HRSA also has a number of initiatives directed at promoting the expansion of electronic health records and other HIT technology in underserved urban and rural communities that are managed by DSCA. Although not strictly limited to rural, these initiatives provide an excellent opportunity for increasing the support for services in rural communities that may deploy broad band applications. Descriptions of DSCA's programs will be forwarded to you under separated cover during the week of April 13.

1. Telehealth Network Grant Program (TNGP)

The TNGP demonstrates how Telehealth programs and networks can improve access to quality health care services in underserved rural and urban communities. The TNGP facilitates a broad range of clinical services. The program is authorized by Section 330I of the Public Health Service Act, 42 USC § 254c-14. The Health Care Safety Net Amendments of 2002 (Public Law 107-251) amended the Public Health Service Act by adding Section 330I. Projects are overseen by HRSA's Office for the Advancement of Telehealth (OAT) within the Office of Health Information Technology (OHIT). The program is currently being competed for a new 3-year cycle of grants.

Under the TNGP, grants are to be awarded in two ways:

- Telehealth Networks (TNGP-TH), which support Telehealth networks that provide services in different settings that include long-term care facilities, community health centers or clinics, physician offices (including dental offices), hospitals, schools, assisted living facilities, homes).
- Tele-homecare Networks (TNGP-THC), which are focused on demonstrating how Telehealth networks can improve healthcare through provision of clinical care and remote monitoring of individuals in their place of residence using Telehealth technologies. TNGP-THC grants provide a mechanism to evaluate the cost and effectiveness of remote tele-homecare services and vital sign monitoring of individual patients and the delivery of healthcare services to individuals in their place of residence by a healthcare provider using telecommunications technologies to exchange healthcare information over a distance.

Applicants must provide an evaluation design to measure process and outcomes. Quantitative outcomes should be measured in the following areas: impact on quality of care; appropriateness of use of the technology; whether access was improved; whether clinical outcomes were improved; and, how the cost of service delivery was affected in terms of efficiency and effectiveness of care.

Organizations eligible to apply for these grants include either rural or urban nonprofit entities that will provide services through a Telehealth network or a tele-homecare network. Although grants for services to urban communities are authorized under the TNGP, the legislation stipulates that the total amount of funds awarded for grants serving rural communities under the TNGP be no less than the total amount of funds awarded for such projects in fiscal year 2001 under the prior Rural Telemedicine Grant Program (RTGP). Past appropriations and the projected FY 09 Appropriation for the TNGP are expected to be less than the FY 01 Appropriation for the RTGP. Therefore, all TNGP grants awarded in FY 09 will be for projects that provide services to rural communities. Eligible applicants may include faith-based and community based organizations, Indian Tribes and Tribal organizations. Network participants may be for-profit or non-profit entities.

The TNGP guidance also specifically lists those types of entities that may participate in an eligible telehealth network [at least two (2) of the following entities must be included of which at least one (1) of which must be a community-based health care provider]. Those entities include:

- Community or migrant health centers or other federally qualified health centers.
- Health care providers, including pharmacists, in private practice.
- Entities operating clinics, including rural health clinics.
- Local health departments.
- Nonprofit hospitals, including community (critical) access hospitals.
- Other publicly funded health or social service agencies.
- Long-term care providers.
- Providers of health care services in the home.
- Providers of outpatient mental health services and entities operating outpatient mental health facilities.
- Local or regional emergency health care providers.
- Institutions of higher education.
- Entities operating dental clinics.
- Other entities may be included in the network (e.g. state or local correctional facilities); however, they shall not be counted as one of the two required sites.

HRSA's website under telehealth programs contains a detailed listing of key organizations that have been funded under the TNGP as well as through other grant programs administered by the Office of Health Information Technology's Office for the Advancement of Telehealth. The link to the list of organizations funded is accessible as follows: http://www.hrsa.gov/telehealth/granteedirectory/overview.htm .

2. Telehealth Resource Center Grant Program (TRCGP)

The TRCGP funds centers of excellence to provide technical assistance to new and existing telehealth programs and networks for increasing the implementation of cost-effective telehealth programs. The ultimate goal of the program is to increase the number of sustainable Telehealth programs that are able to breech the barriers rural and underserved communities face in providing access to services and quality of health care to those in need.

The TRCGP has been instrumental in assisting start-up telehealth networks that desire to provide critically needed clinical services to underserved populations. The TRCGP funds those organizations with experience in providing clinical care through telehealth technology to connect people and disseminate lessons learned so that limited funds devoted to telehealth can be most effectively utilized.

The TRCGP is authorized under the Health Care Safety Net Amendments of 2003, Section 330I of the Public Health Service Act, P.L. 107-251. The program is administered by the Office for the Advancement of Telehealth in the Office of Health Information Technology, Health Resources and Services Administration. Funds were appropriated for the TRCGP in 2005 and the program was started in 2006. The program is currently being competed for a new three-year cycle of grants.

In the first 2006 competition, each of the five Regional Resource Centers (with a strong record in implementing telehealth services) was chosen to serve as focal points for providing technical assistance (TA) for nascent telehealth programs to advance the effective use of telehealth technologies. The Regional Resource Centers provide customized technical assistance at three levels: promoting peer-to-peer consultation, individualized consultations, and broad-based technical assistance through websites, webinars, and other distance educational/outreach efforts to facilitate: effective technology assessment and implementation; navigating telemedicine reimbursement and other payment issues; project/program evaluation; network operations; strategic/business planning; best practice models; evaluation design and metrics; clinical protocol development; telecommunications; industry standards; and locating and assessing funding sources.

One National Resource Center was selected to provide a mechanism for sharing experiences across the nation in addressing legal and regulatory barriers to the effective implementation of telehealth technologies. The National Resource Center is available to assist with: reimbursement; licensure; FDA regulatory issues; credentialing and accreditation; privacy, security and confidentiality; and, telecommunications legal and regulatory issues.

A broad range of organizations, which would either be eligible for funding under the TRCGP, or be beneficiaries of the services provided by grantees under the TRCGP, are interested in the TRCGP. Eligible applicants include public and private nonprofit organizations and institutions, including State and local governments. Faith-based and community-based organizations are eligible to apply for the TRCGP, as are tribes and tribal organizations. Critically, this program focuses on grantees that will provide technical assistance as opposed to merely providing telehealth services. Accordingly, applicants and network partners must demonstrate that they have the ability to provide effective technical assistance based on their successful track record in devising implementing and managing telehealth networks. A link to an overview and areas served by the resource centers is as follows: http://www.cteconline.org/TRC.html

The links for the 6 grantees that currently receive funding under the TRCGP, are as follows:

1. Center for Telehealth and eHealth Law (National Center)
2. California Telemedicine & eHealth Center
3. Great Plains Telehealth Resource Center and Assistance Center
4. Midwest Alliance for Telehealth and Technology Resources
5. Northeast Telehealth Resource Center
6. Northwest Regional Telehealth Resource Center

3. **Licensure Portability Grant Program (LPGP)**

The LPGP provides support for State professional licensing boards to carry out programs under which licensing boards of various States cooperate to develop and implement State policies that will reduce statutory and regulatory barriers to telemedicine practiced across state lines. Although not strictly a rural issue, cross-state licensure barriers are increasingly thought to be a barrier in many rural areas of the United States.

The LPGP is authorized by Section 330L of the Public Health Service Act, 42 USC 254c-18. This grant program is under the auspices of the Health Resources and Services Administration (HRSA), U.S. Department of Health and Human Services (HHS). Projects are overseen by HRSA's Office for the Advancement of Telehealth (OAT) within the Office of Health Information Technology.

Funds were authorized in 2002 but not appropriated for the program until 2005, and the LPGP was launched in 2006. The program is designed to leverage the experience of State licensing boards that have a strong record in implementing cross-border activities to overcome licensure barriers to the provision of telemedicine services across many states. The program is currently undergoing a competition for a new 3-year cycle of grants.

Of great current concern for telemedicine providers has been state licensure restrictions against cross-state practice for physicians, requiring physicians to have a license in each state where he or she may provide telemedicine services on a regular basis. This is particularly a problem for physicians who are providing highly specialized services around the country, particularly mental health services, where available and cost-effective specialized expertise often resides across state lines from where the most medically underserved populations are located. In addition, there is often a pressing need for oral health services that can be met with practitioners from other states.

Under the current 3-year Licensure Portability grant, the Federation of State Medical Boards (FSMB) is developing model agreements in two regions of the country (Northeast and West) to expedite the licensure process and eliminate redundancies associated with applying for licenses in multiple jurisdictions. Thirteen state medical boards have been involved in this initiative – 1) In the Northeast, six states: Maine, Massachusetts, Vermont, Connecticut, Rhode Island, and New Hampshire; and, 2) In the West, seven states: North Dakota, Kansas, Colorado, Minnesota, Iowa, Idaho, and Oregon.

The need to harmonize licensure rules across states also has been well recognized by the nursing profession. The Nurse License Compact was developed by the National Council of State Boards of Nursing (NCSBN) in the late 1990s. The mutual recognition model of nurse licensure allows a nurse to have one license (in his or her state of residency) and to practice in other states (both in person and electronically), subject to each state's practice law and regulation. Although there was quick adoption of the compact initially, adoption has been slow and to date, only 23 states have adopted the compact. Under a 3-year Licensure Portability grant, the NCSBN continues to address barriers that prevent interstate nursing practice by focusing on providing pathways to facilitate the adoption of the Uniform Core Licensure Requirements (UCLRs) which include criminal background checks (CBCs). In addition, NCSBN has helped promote the Nurse Licensure Compact (NLC) which promotes adoption of the UCLRs.

The FY2009 competition will seek projects that can clearly serve as national models and have implications for overcoming State statutory and regulatory licensure barriers to cross-state practice of telemedicine for all the health professions, with an emphasis on projects proposed by boards or national organizations of professional licensing that have demonstrated success in pioneering creative programs to address these issues.

A link to the FSMB, which outlines its public policy activities, including the OAT-funded LPGP grant is http://www.fsmb.org/ . The contact for the grant is Lisa A. Robin, Senior Vice President, Member Services, phone number 817-868-4053.

A link to the NCSBN, which outlines its public policy activities, including the OAT-funded LPGP grant is https://www.ncsbn.org/index.htm . The contact for the grant is Kristen Ann Hellquist, MS, Policy and Government Relations Director, phone number 312-525-3665.

B. **Office of Rural Health Policy**

The Office of Rural Health Policy (ORHP) promotes better health care service in rural America. Established in August 1987 by the Administration, the Office was subsequently authorized by Congress in December 1987 and located in the Health Resources and Services Administration. Congress charged the Office with informing and advising the Department of Health and Human Services on matters affecting rural hospitals, and health care, coordinating activities within the department that relate to rural health care, and maintaining a national information clearinghouse. The Office works both within government at federal, state and local levels, and with the private sector -- with associations, foundations, providers and community leaders -- to seek solutions to rural health care problems.

Grant Programs for Rural Providers

- Rural Health Outreach grants support service delivery through collaboration. Each grantee forms a consortium with at least two partners.
- Network Development grants support the development of networks of at least three health care organizations that integrate systems of care administratively, clinically, financially and technologically.

- Network Development Planning one-year grants support planning to develop and operationalize health care networks.
- Delta States Rural Development Network grants support development of new and innovative health care delivery systems in the Mississippi Delta region.
- Delta Rural Hospital Improvement Project grants support hospitals in the Mississippi Delta region improve financial, quality and operational performance.
- Delta Health Initiative Cooperative Agreement Program aims to improve the health status of the people living in the rural Mississippi Delta.
- Rural Access to Emergency Devices grants assist rural communities to purchase automated external defibrillators (AEDs) and provide training in their use and maintenance.
- Public Access to Defibrillation Demonstration Projects grants support projects that increase public access to emergency medical devices and services.
- Small Rural Hospital Improvement grants assist small rural hospitals to pay for costs related to the implementation of PPS, comply with provisions of HIPAA and reduce medical errors and support quality improvement.
- Frontier Extended Stay Clinic Cooperative Agreement grants examine the effectiveness and appropriateness of this new type of health care provider in certain remote locations.
- Small Health Care Provider Quality Improvement grants assist rural providers with the implementation of quality improvement strategies, while improving patient care and chronic disease outcomes.
- Black Lung Clinics grants support public and private nonprofit entities in the operation of clinics that provide diagnosis, treatment, and rehabilitation of active and retired coal miners with respiratory and pulmonary impairments.
- Radiation Exposure Screening and Education grants support health care providers in the operation of clinics that educate, screen, diagnose and treat people affected by the mining, transport and processing of uranium and the testing of nuclear weapons for the Nation's weapons arsenal.

Grant Programs for States

- FLEX Critical Access Hospitals Health Information Technology Network grants support the development of pilot programs in States that create networks to develop and implement Health Information Technology systems, such as practice management, disease registry, care management, clinical messaging, personal health record, electronic health records and health information exchange systems.
- State Offices of Rural Health grants assist States in strengthening rural health care delivery systems by maintaining a focal point for rural health.
- Rural Hospital Flexibility grants are awarded to States to help them develop and implement Rural Health Plans with broad collaboration; stabilize rural hospitals by helping them consider, plan for and obtain designation as Critical Access Hospitals; assist Critical Access Hospitals, other providers, and communities as they develop networks of care; improve and integrate emergency medical services; and improve quality of care.

IV. Centers for Disease Control – Contact: Carl Kinkead, mke5@cdc.gov, (404) 498-2468

CDC does not support broadband directly in local and state health but we support programs, such as TB, HIV/AIDs, Cancer, Immunization, that may use part of their money to pay for connections. The FCC's broadband initiative does support CDC's public health grid initiative though. CDC are working on a geospatial shared services framework to share web services across public health to support programs and leverage each others investments so the broadband initiative definitely supports that.

Department of Agriculture – Contact: Jonathan P. Claffey, Jon.Claffey@wdc.usda.gov, (202) 720-9556

USDA Rural Development administers over 40 programs that provide infrastructure, housing, community facilities, and economic development assistance to rural residents, businesses and communities. Programs include grants, loans, loan guarantees, and technical assistance. The total loan portfolio (direct and guarantees) now exceeds $110 billion. $53.4 billion of this total portfolio is managed by Rural Utilities Service (RUS).

Rural Utilities Service Programs

- RUS provides capital for rural electric, telecommunications, and water and environmental projects.

- RUS programs leverage federal funds with private capital for investing in rural infrastructure, technology, and the development of human resources. Direct and guaranteed loans and grants are available. Financial assistance is provided to rural utilities; municipalities; commercial corporations; public utility districts; Indian tribes; and cooperative, nonprofit, limited-dividend, or mutual associations.

Department of Housing And Urban Development – Contact: Laura Grossman, Laura.S.Grossman@hud.gov, (202) 402-5541

I. Public & Indian Housing/Office of Native American Programs (ONAP)

Rural Housing and Economic Development

In addition, ONAP administers programs for Indian tribes and organizations that are inherently rural, but not defined as such. These program are:

Indian Housing Block Grant
Indian Community Development Block Grant
Native Hawaiian Housing Block Grant
Section 184 Loan Guarantee
Section 184A Loan Guarantee

Title VI Loan Guarantee

II. Office of Universities Partnerships

Tribal Colleges and Universities Programs – The purpose of the program is to assist Tribal Colleges and Universities (TCU) to build, expand, renovate, and equip their own facilities, and to expand the role of the TCUs into the community through the provision of needed services such as health programs, job training, and economic development activities.

III. Office of Rural Housing and Economic Development

The Office of Rural Housing and Economic Development was established in the Department of Housing and Urban Development under Public Law 105-276, October 21, 1998 by the Congress. The law consisted of three congressional directives: 1) establish an office called the "Office of Rural Housing and Economic Development;" 2) administer a competitive program called the "Rural Housing and Economic Development Program," with a congressionally mandated announcement deadline of June 1 or September 1 of each year; and 3) develop a clearinghouse of ideas for innovative strategies for rural housing and economic development and revitalization. In addition to these directives, the office director also administers the Section 4 Loan Guarantee Recovery Fund (Church Arson Loan Guarantee Program).

The purpose of the Rural Housing and Economic Development Program is to develop capacity at the State and local level and support innovative rural housing and economic development. Grants are awarded to local rural nonprofits, community development corporations, federally recognized Indian tribes, State housing finance agencies, and State community and/or economic development agencies. This program is designed to address the problems of rural poverty, inadequate housing, and lack of economic opportunity with a specific focus on high need rural areas including the Lower Mississippi Delta Region (8 states and 240 counties), the Colonias, the Appalachia's Distressed Counties, Federally recognized Indian tribes, and Seasonal farm workers.

The purpose of the Rural Gateway is to facilitate informational services, technical assistance, training, and investment capital for local rural, state, and regional organizations in order to support their efforts to rebuild and preserve healthy, productive communities. Furthermore, the Rural Gateway acts as a screen/filter for private sector organizations to establish economic development based initiatives. The objectives are to: 1) build capacity of organizations working on housing, economic development and infrastructure development; 2) serve as a promoter and screen/filter of private sector based partnerships to support housing, economic development, infrastructure and capacity building activities; and 3) improve and streamline access of these organizations to different sources of government, nonprofit, and for-profit sources of investment capital, technical assistance and training and information.

The Rural Gateway menu of services include: 1) 1-800 information specialist (1-877-Rural-26) and website (www.hud.gov/ruralgateway); 2) technical assistance and training; 3) rural case studies; 4) internet links to rural housing and economic development resources sites; 5) funding

summaries; 6) peer-to-peer forums (conferences, workshops, listservs); and 7) private sector partnership interface mechanism.

Small Business Administration/Office of Advocacy – Contact: Cheryl M. Johns, Cheryl.Johns@sba.gov, (202) 205-6949

Advocacy does not have specific rural programs, but has conducted research and commented on rural small business needs. Our last study was entitled: Broadband Use by Rural Small Businesses.

Department of Education

Office of Special Education and Rehabilitative Services (OSERS) – Contact: Jennifer Sheehy, Jennifer.sheehy@ed.gov, (202) 245-7520

I. Office of Special Education Programs (OSEP)

OSEP's mission is to improve results for infants, toddlers, children, and youth with disabilities ages birth through 21 by providing leadership and financial support to assist states and local districts. The Individuals with Disabilities Education Act (IDEA) authorizes formula grants to states, and discretionary grants to institutions of higher education and other non-profit organizations to support research, demonstration projects, technical assistance and dissemination, technology and media services, personnel development, and parent-training and information centers. IDEA serves approximately 6.8 million children and youth with disabilities. IDEA programs are funded at approximately $13 billion.

OSEP has no programs that are specifically focused on rural or broadband services and issues. However, OSEP administers two types of programs authorized under the Individuals with Disabilities Education Act (IDEA) which may have relevance to the rural broadhand initiative. The formula grant programs authorized under IDEA Parts B and C award state-level grants to support the provision of services to children with disabilities, and the discretionary programs authorized under IDEA Part D award contracts and grants in such areas as personnel development, technical assistance and dissemination, parent training and information, technology development and demonstration, media services, and instructional materials. While none of these programs can make major direct investments in developing broadband infrastructure, they can contribute by (a) stimulating interest and demand for broadband in rural areas which may contribute to public and private investments in broadband infrastructure, and (b) providing limited support for the acquisition of equipment and alteration of facilities to contribute to broadband infrastructure. Examples follow –

- Under certain circumstances, IDEA formula grant funds can be used for the acquisition of equipment and the construction or alteration of facilities, although the degree to which such expenditures might contribute to rural broadband has not been determined. For example, IDEA funds can be used to purchase assistive technology devices and services for children with disabilities if required as part of their special education or related services. In addition, in some cases IDEA formula grant funds may be used in the construction or alteration of facilities. Such expenditures must improve services for children with disabilities under IDEA

and may require approval from the Secretary of Education. If such expenditures were found to be appropriate to support some aspect of rural broadband development, the benefits would be limited primarily to students with disabilities, but partnership arrangements with other agencies might be possible in which resources were pooled to build broadband infrastructure to benefit multiple service populations. [Jennifer—We need some legal input on this to see how viable it might be as an option for IDEA to contribute to broadband development.] OSEP already has partnership arrangements with other federal agencies that might provide a basis for these efforts. For example, OSEP participates in a workgroup on early childhood services with agencies from the Department of Health and Human Services, including the Child Care Bureau, Office of Head Start, Health Resources and Services Administration, and the Substance Abuse and Mental Health Services Administration. This workgroup does not specifically address rural broadband as a topic and has no direct funding authority, but it and similar workgroups might provide a starting point for the development of interagency broadband efforts.

- Providing services mandated under Parts B and C to children in rural settings has been found to involve challenges for which broadband services might be particularly useful. For example, efforts to provide early childhood services in natural settings such as the home are more difficult in rural settings, but broadband allows service providers to visit homes remotely and provide information, training and support. Similar benefits have been observed in other types of service, such as assistive technology evaluations. Services involving specialized forms of professional expertise or low-incidence disabilities may particularly benefit from broadband services in rural areas.

- Several of the Part D discretionary programs support projects that make use of broadband technology, and broadband access is becoming an essential component of many of the efforts supported under Part D. For example, the Parent Training and Information Centers and Community Parent Resource Centers increasingly rely on broadband to deliver information and training in rural areas, and in some cases the absence of broadband is a significant barrier to the performance of their missions. Personnel preparation programs are increasingly making use of distance education based on broadband technologies, and rural broadband is necessary to make some training opportunities available to personnel in rural areas. Projects that distribute accessible media and materials, such as Bookshare, Captioned and Described Educational Media, Recordings for the Blind and Dyslexic, and Television Access projects rely on broadband technology to deliver their services and materials.

II. Rehabilitation Services Administration (RSA)

RSA administers the Assistive Technology (AT) State Grants Programs:

- AT State Grants programs strive to make Assistive Technology equally available to all individuals with disabilities throughout the state...to expand the availability of access to technology, including electronic and information technology to individuals with disabilities.
- Individuals with disabilities can benefit from broadband access through:

- Virtual assistive technology device demonstrations
- Virtual training/tech support on device use
- Efficient access to online exchange programs of assistive technology devices.
- AT programs provide financial loans to individuals with disabilities to enable them to purchase the technology necessary to work from home (or any other remote location). Broadband access (or lack thereof) could have an impact on this ability.
- AT programs provide financial loans to individuals with disabilities to enable then to purchase any assistive technology device which can include equipment for distance education and/or information technology connectivity.

III. National Institute on Disability and Rehabilitation Research (NIDRR)

NIDRR, through its Rehabilitation Engineering Research Center (RERC) on Universal Interface and Information Technology Access, is working to ensure that all broadband services are accessible and usable by people with disabilities. NIDRR, through this Center, is exploring ways to ensure that people with disabilities from all socio-economic levels are able to access broadband (Internet) based information and services.

NIDRR, through its RERC on Telerehabililtation, serves people with disabilities by researching and developing methods, systems, and technologies that support remote delivery of rehabilitation and home health care services for individuals who have limited local access to comprehensive medical rehabilitation outpatient and community-based services.

NIDRR, through its Rural Rehabilitation Research Training Center (RRTC), has funded research that specifically targeted telecommunications for people with disabilities living in rural areas. Such as:

1. Rates of computer and Internet use: A comparison of urban and rural access by persons with disabilities examines rates of computer ownership, computer use, and Internet access.
2. Rural facts: Disability and the digital divide: Comparing surveys with disability data. Facts sheet presented an analysis of national surveys examining Internet access and use by people with disabilities. The surveys consistently showed that as computer access and internet use has steadily increased, both metropolitan and non-metropolitan people with disabilities have lower access rates than their geographic counterparts with no disability. However, non-metropolitan people with disabilities have the lowest rate.
3. Issues related to accessibility of telecommunications for people living in rural areas addresses physical and economic aspects accessibility, legal protections for access, and issues of equity.
4. Social isolation of persons with disabilities, effects of telecommunications on rural health care and rehabilitation services, barriers to telecommunications access, and related federal legislation.
5. Tele-health promotion for rural people with disabilities: Toward a technology assisted peer-support model. This study examined the feasibility of an Internet health promotion program for people with disabilities who live in rural areas. Based on recommendations,

procedures and materials were being developed to combine peer support with the online program to use in the outreach efforts to increase consumer participation.

Many of the products and services that NIDRR grantees have produced would have greater accessibility and availability if a rural broadband initiative was implemented.

DoEd, Office of Elementary and Secondary Education – Contact: Jenelle Leonard, Jenelle.Leonard@ed.gov, (202) 401-3641

1. Rural Education Achievement Program

- The Small, Rural School Grant Program

This program includes:

- The Small, Rural School Grant Program

PROGRAM DESCRIPTION
The purpose of this program is to provide financial assistance to rural districts to assist them in meeting their state's definition of adequate yearly progress (AYP). Applicants do not compete but rather are entitled to funds if they meet basic eligibility requirements. Eligibility is restricted by statute. Awards are issued annually directly to eligible LEAs on a formula basis.

Recipients may use program funds to conduct activities under the following ESEA programs: Title I, Part A (Improving Basic Programs Operated by LEAs; # 84.010); Title II, Part A (Improving Teacher Quality State Grants, # 84.367); Title II, Part D (Educational Technology State Grants, # 84.318); Title III (Language Instruction for Limited English Proficient and Immigrant Students); Title IV, Part A (Safe and Drug-Free Schools and Communities); Title IV, Part B (21st-Century Community Learning Centers, # 84.287); and Title V, Part A (State Grants for Innovative Programs).

- Rural and Low-Income Schools Program

PROGRAM DESCRIPTION
The purpose of the program is to provide financial assistance to rural districts to assist them in meeting their state's definition of adequate yearly progress (AYP). Applicants do not compete but rather are entitled to funds if they meet basic eligibility requirements. Eligibility is restricted by statute.

Awards are issued annually to SEAs, which make subgrants to LEAs that meet the applicable requirements. Awards are made to all SEAs that apply and meet the applicable requirements of the act. If an SEA does not participate, awards are issued by the Department to eligible LEAs in the state either competitively or by formula.

Recipients may use program funds to conduct the following activities:

- Teacher recruitment and retention, including the use of signing bonuses and other financial incentives;
- Teacher professional development, including programs that train teachers to use technology to improve teaching and that train teachers of students with special needs;
- Support for educational technology, including software and hardware, that meets the requirements of ESEA, Title II, Part D (Enhancing Education Through Technology; # 84.318);
- Parental involvement activities;
- Activities authorized under the Safe and Drug-Free Schools and Communities: State Grants program (ESEA, Title IV, Part A, Subpart 1; # 84.186A);
- Activities authorized under ESEA, Title I, Part A (Improving Basic Programs Operated by LEAs; # 84.010); or
- Activities authorized under ESEA, Title III (Language Instruction for Limited English Proficient and Immigrant Students).

II. Center for Rural Education

The Center for Rural Education (CRE) is responsible for providing a unified approach to rural education through the coordination of programs within the Department. The CRE also works with the Federal Interagency Committee on Education to coordinate related activities and programs of other Federal department and agencies. The CRE serves as the Department's principal voice on education issues affecting rural populations nationwide.

Department of the Interior - Contact: Stuart Ott, Stuart_Ott@ios.doi.gov, (703) 648-5517

The Department of the Interior (DOI) is the nation's principal conservation agency. Our mission is to protect America's treasures for future generations, provide access to our nation's natural and cultural heritage, offer recreation opportunities, honor our trust responsibilities to American Indians and Alaska Natives and our responsibilities to island communities, conduct scientific research, provide wise stewardship of energy and mineral resources, foster sound use of land and water resources, and conserve and protect fish and wildlife. The work that we do affects the lives of millions of people; from the family taking a vacation in one of our national parks to the children studying in one of our Indian schools.

Interior is a large, decentralized agency with over 67,000 employees and 280,000 volunteers located at approximately 2,400 operating locations across the United States, Puerto Rico, U.S. territories, and freely associated states. We discharge our responsibilities on a $16.8 billion total annual budget. DOI raises more than $18.2 billion in revenues collected from energy, mineral, grazing, timber, recreation, land sales, and other revenue producing activities.

DOI manages 500 million acres of surface land, or about one-fifth of the land in the United States. Much of this land is located in rural areas.

- 256 million acres managed by the Bureau of Land Management
- 96.2 million acres managed by the Fish and Wildlife Service
- 84.6 million acres managed by the National Park Service
- 8.7 million acres managed by the Bureau of Reclamation associated with Reclamation projects
- 66 million acres managed by the Bureau of Indian Affairs
- Over 200,000 acres of abandoned coal mine sites have been reclaimed through the Office of Surface Mining's Abandoned Mine Land Program.

Department of Commerce

1. Economic Development Administration (EDA) – Contact: Maureen Klovers, mklovers@eda.doc.gov, (202) 482-2785

EDA administers the following programs, all of which have recipients in both rural and urban areas:

- **Public Works and Economic Development** investments help distressed communities to revitalize, expand, and upgrade their physical infrastructure to generate or retain long-term, private-sector jobs and investment. In the past, EDA has used this program to construct business incubators and expand broadband networks, among many other activities.
- **Planning** investments encourage and support professional planning and related services through local development organizations. In the past, EDA has used this program to conduct feasibility studies for business incubators and other innovation-based projects, as well as develop and update Comprehensive Economic Development Strategies, which often have a strong innovation focus.
- **Technical Assistance** investments help communities assess the potential success of economic development investments, provide technical expertise, and develop innovative demonstration projects. The bulk of program funds are used to support EDA's network of University Centers, which support a wide variety of innovative activities tailored to the unique needs of the regions they serve, ranging from a legal clinic for entrepreneurs, to a horticultural institute focusing on linking organic producers to the worldwide marketplace, to a center focused on commercializing research in the field of alternative energy. Others focus on technology transfer programs or services for manufacturers.
- **The Research and Evaluation** program supports the development and dissemination of critical, cutting-edge research and best practices to regional, state, and local practitioners in the economic development field.
- **Trade Adjustment Assistance for Firms** funds a national network of eleven Trade Adjustment Assistance Centers (TAACs) to help U.S. manufacturing and production firms that have lost domestic sales and employment due to increased import competition become more globally competitive.
- **The Economic Adjustment Assistance (EA)** program provides a flexible portfolio of investment assistance to communities facing economic crises. Using this program, communities develop a regional strategy that re-thinks their economic future and develop

action plans. Once the regional strategy is in place, EDA provides critical implementation assistance through local capacity-building initiatives, essential infrastructure projects, and the capitalization of revolving loan funds.

II. National Telecommuncations and Information Administration (NTIA) – Contact: Tim Sloan, tsloan@ntia.doc.gov, (202) 482-1880

NTIA has no rural-specific programs. It does, however, have a number of grant programs that may provide funds to organizations and activities in rural areas:

- Broadband Technology Opportunity Program (BTOP)

  The American Recovery and Reinvestment Act of 2009 (Recovery Act), P.L. 111-5, appropriated $4.7 billion to BTOP for the purpose, among other things, of issuing grants to extend broadband communications facilities and services to "unserved" and "underserved" areas. Many unserved areas, in particular, would likely be classified as "rural" under other Federal programs (*e.g.*, the U.S. Department of Agriculture's (USDA) telecommunications loan and grant programs). BTOP funds will also be available for various community anchor institutions (libraries, schools, hospitals, public safety) that serve rural areas. NTIA is now in the process of implementing BTOP. Initial grant awards will be made later this year.

- Public Telecommunications Facilities Program (PTFP)

  PTFP is a competitive grant program to help public broadcasting stations, state and local governments, Indian Tribes, and nonprofit organizations construct facilities to bring educational and cultural programs to the American public using broadcasting and nonbroadcasting telecommunications technologies.

- Low Power Television and Translator Grant Programs

  NTIA has two grant programs in this area: The Conversion Program provides funds to low-power television stations (LPTV) that must purchase devices to convert incoming digital signals from full-power television stations to analog for retransmission by the LPTV stations. The Upgrade Program will provide funds to upgrade analog low-power television broadcast stations, Class A television stations, television translator stations, and television booster stations in rural communities to digital transmission.

Appalachian Regional Commission – Contact: Mark DeFalco, mdefalco@arc.gov, (202) 884-7719

The Appalachian Regional Commission (ARC) is an economic development agency which operates in the 420 counties of Appalachia. Special emphasis is placed on economically distressed counties. 42% of the population in Appalachia is considered rural. The ARC program

activity includes a wide range of assistance including the construction of the Appalachian Development Highway System (ADHS), health care initiatives, assistance in the construction of water and sewer infrastructure, education and workforce training assistance, capacity building, entrepreneurship efforts, telecommunications and telemedicine activities and other specific activities related to improving the economic climate in Appalachia.

Delta Regional Authority – Contact: Bill Triplett, btriplett@dra.gov, (202) 689-4134

DRA Overview

The Delta Regional Authority (DRA and Authority) is a federal-state partnership created by Congress in the "Delta Regional Authority Act of 2000", empowering the agency to stimulate economic growth throughout the impoverished Mississippi Delta with its robust regional planning, increased coordination with appropriate stakeholders and targeted investment.

The Authority's region includes 252 counties and parishes in the states of Alabama, Arkansas, Illinois, Kentucky, Louisiana, Mississippi, Missouri and Tennessee, and its governance includes a board led by the Federal Co-Chairman (appointed by the President and confirmed by the Senate) and the governors of the participating eight states.

For more information about the Authority, please go to www.dra.gov.

Federal Grant Program Overview

Since its inception, the DRA has operated its successful federal grant program, maintaining a very strong record of releasing its funds to grantees in a timely manner. Specifically, the DRA has four categories of funding priority:

- Basic Public Infrastructure such as water and sewer systems, bricks and mortar, IT deployment and Broadband;
- Transportation Infrastructure such as highways, ports and rail spurs;
- Workforce Training such as nursing programs and industrial workforce training; and
- Business Development such as business incubators.

As the Authority is a regional planner and coordinator of federal investment, it utilizes basic federal agencies to serve as its day-to-day project administrator, and its most-frequent partner in that role is USDA. Since 2003, the DRA has a Memorandum of Understanding (MOU) with the U.S. Department of Agriculture Rural Utilities Services (USDA-RUS).

Key Policy Points.

DRA's federal grant program requires:

- Project sustainability beyond the initial investment
- At least 50 percent of its funds to basic public and transportation infrastructure (which includes IT-related infrastructure deployment)

- At least 75 percent of its funding to distressed counties
- Creation and/or retention of jobs, training of people for jobs waiting for them or connecting families to new residential water/sewer.
- Repayment of pro rata share of grant funds if project outcome benchmarks are not realized.

Not surprisingly because of its footprint, most of DRA's federal grant investments are made into rural areas. In fact, in 2006, GAO affirmed that DRA's federal grant program led the nation with its "Rural Investment" intensity, as 77 percent of its investments went into rural areas.

Key Leverage Measures

When Congress created the Authority, it recognized and acknowledged that many rural communities and counties were too poor to compete effectively with other, more-wealthy areas for federal funds. Simply stated, many entities within the DRA did not have the cash to meet the federal match requirements, so therefore, missed funding opportunity after funding opportunity.

Accordingly, Congress sought to remedy this deficiency by mandating that DRA's federal funds would lose their "federal identity", thereby qualifying the Authority to provide the state or local match needed to procure those other federal funds, and to do so while maintaining the grant/match integrity.

After its first seven federal grant cycles, DRA has the empirical evidence to show in the 439 projects it has invested $64.0 million of its funding:

- The Authority has leveraged (matched) more than $301 million of other federal, state and local finds – leverage ratio of 1 to 4.71.
- Coupled with its partner investments, DRA is helping to attract more than $1.6 Billion in private-sector investment, a leverage ratio of 1 to 25.66.

Key Program Outcomes

Since the inception of DRA Federal Grants Program, 204 projects have been completed with the following results:

- 2,801 jobs created
- 6,075 jobs retained
- 13,301 families received improved water and sewer
- 2,588 individuals trained for jobs in their areas.

DRA now has 157 projects which are active with projected outcomes including: 17,335 families who will receive improved water and sewer, 4,306 jobs which will be created, 6,659 jobs which will be retained and 1,198 individuals who will be trained for jobs already committed to this Authority.

For more information about DRA's federal grant program, please go to http://dra.gov/state-grant-funding/.

Institute of Museum and Library Services – Contact: Mamie Bittner, MBittner@imls.gov, (202) 653-4630

The Institute of Museum and Library Services administers grant programs, collect data and conducts research to build the public service capacity of libraries and museums. It supports innovation, professional development, preservation, community partnerships and a host of educational programs. While the agency has supported many programs that take place in rural areas, there is no specific program for rural development.

National Council on Disability – Contact: Martin Gould, mgould@ncd.gov, (202) 272-2004

We have no rural programs. NCD is an independent federal agency that does not offer programs or services.

Question 2: Please list and describe your agency's broadband programs.

Department of Health and Human Services

I. Agency for Healthcare Research and Quality (AHRQ)

AHRQ does not have any broadband programs.

II. Indian Health Service (IHS)

The IHS telecommunication network connects IHS and participating Tribal sites via a cloud-based, Multi Protocol Label Switching (MPLS) network. The average site connects to the IHS network via broadband circuits. The IHS network in turn connects to the HHS network (HHSNet) through two redundant connections in IHS offices in Albuquerque, New Mexico, and Rockville, Maryland. The network is built of routers, switches, and hardware that support Quality of Service.

The IHS, like other government agencies, purchases broadband services through FTS2001 contracts. The IHS Wide Area Network (WAN) is a MPLS broadband network allowing T1 (1.5Mb/s), multiple T1s, DS3 (45Mb/s) and OC services. Approximately 400 IHS sites connect to the IHS WAN with a T1 speed. In addition, there are approximately 40 DS3 circuits; many of those are located in regions that received additional funding per broadband telehealth grants.. The overall IHS broadband usage has doubled over the last 3 years from 35Mb/s to 70Mb/s aggregated across the core network, stemming from an increase in Internet vendor based programs, and from increased telemedicine use to provide higher levels of services in rural areas.

III. Health Resources and Services Administration (HRSA)

Programs administered by the Office for the Advancement of Telehealth (OAT) and the Division of State and Community Assistance (DSCA) within HRSA's Office of Health Information

Technology (OHIT) are focused in facilitating, indirectly, the deployment of broadband technology. This is accomplished through grants and contracts that stimulate the market and build the demand for broad band/advanced telecommunications services and/or provide technical assistance to allow users to more effectively deploy broad band infrastructure in their programs, when appropriate.

Our agency intends to work closely with USDA's Rural Utilities Service (RUS) and the Department of Commerce's National Telecommunications and Information Administration (NTIA), whose Federal programs directly deploy broadband facilities through direct payments for the build-out of telecommunications infrastructure.

In a similar fashion, the Office of Rural Health Policy's programs stimulate demand for broadband through their grants and contracts to promote HIT in rural communities.

IV. Centers for Disease Control

No Response

Department of Agriculture

The telecommunications program contains two major sources of broadband funding:

- Loans for infrastructure improvement and expansion; since 1993 all facilities financed must be broadband-capable;

- Loans and grants specifically targeted for the deployment of broadband service in small towns and communities.

The infrastructure loan program was created in 1949 and provides loan financing for rural telecommunications service providers serving communities of 5,000 or less.

The broadband loan program was created by the 2002 Farm Bill and subsequently reauthorized and modified by the 2008 Farm Bill. This program is designed to provide funding for the cost of constructing, improving, and acquiring facilities and equipment for broadband service in rural communities of 20,000 inhabitants or less. Program funds are provided through a variety of direct and guaranteed loans. The program was reauthorized and modified under the 2008 Farm Bill.

The Community Connect grant program provides grants to a single rural community which is totally unserved by broadband.

Both the broadband loan program and the Community Connect grant program serve rural communities with population less than 20,000.

Funding under the American Recovery and Reinvestment Act:

RUS is authorized $2.5 billion in budget authority under the ARRA. This program will support the expansion of broadband service in rural areas through financing and grants to projects that provide access to high speed service and facilitate economic development in locations without sufficient access to such service and target unserved rural areas.

The ARRA broadband program will:

- Ensure that broadband service is provided to rural areas lacking access, targeting un-served;
- Consider the impact on existing borrowers and prioritize their needs;
- Implement in concert with NTIA/Commerce/FCC national strategy;
- Meet legislative obligation requirements by 9/2010; and
- Establish appropriate monitoring and servicing of the investments at the outset to ensure the objectives are achieved.

The legislation requires that 75 percent of the areas to be served by a project receiving funds shall be in a rural area without sufficient access to high speed broadband service to facilitate rural economic development.

Department of Housing And Urban Development – Contact: Laura Grossman, Laura.S.Grossman@hud.gov, (202) 402-5541

I. Public & Indian Housing/Office of Native American Programs (ONAP)

None

II. Office of Universities Partnerships

The Office of University Partnerships does not have any special broadband programs.

III. Office of Rural Housing and Economic Development

Not Applicable

Small Business Administration/Office of Advocacy

Advocacy does not have formal broadband programs, but files regular comments with the FCC and other agencies as needed on broadband and other telecommunications issues.

Department of Education

Office of Special Education and Rehabilitative Services

I. Office of Special Education Programs (OSEP)

See response to Question 1.

II. Rehabilitation Services Administration (RSA)

Not applicable.

III. National Institute on Disability and Rehabilitation Research (NIDRR)

See response to Question 1.

DoEd, Office of Elementary and Secondary Education

The Grant programs listed in response to Question 1 provide and deliver digital content and professional development using broadband and/or produce applications requiring broadband access. The grant programs are not specifically for broadband deployment.

Department of the Interior

DOI consolidated the management of its data services in 2003 by utilizing the GSA FTS2001 Contract. The incumbent was awarded the task of creating the DOI Enterprise Services Network (ESN). The ESN is the end result of DOI's multi-year consolidation and data network reconfiguration effort to centralize the management of five (5) Enterprise Secure Internet Gateways and approximately thirteen (13) wide area networks (WANs) across the country into a single network. As a result of this consolidation and network reconfiguration, DOI's intranet and internet traffic has been consolidated to significantly enhance security and efficiency.

The ESN Contract was designed to provide site-to-site data services via high-speed networks to support applications (e.g., upgraded e-mail, electronic commerce, security services, and videoconferencing) through outsourced services from commercial carriers. These carriers were to provide a private backbone network primarily comprised of circuits, equipment and services procured through the GSA FTS2001 Contract. Currently, the incumbent is responsible for the oversight and management of multiple data communications carriers for service delivery, trouble resolution, and billing functionality. This network supports over 75,000 employees and 200,000 volunteers at approximately 2,600 service delivery points (SDPs) and is engineered to provide secure, state-of-the-art internet and intranet connections and a fully functional operational center for data communications.

The Department additionally runs a separate network, the Educational Native American Network – II (ENAN-II) which provides wide area and internet services to 185 Native American K-12

Schools, 2 Universities and 24 Tribally Controlled Community Colleges. The ENAN-II directly supports 50,000 Elementary and Secondary Students in 23 States.

Department of Commerce

I. EDA

EDA occasionally awards grants to extend rural broadband networks through its Public Works and Economic Development and Economic Adjustment Assistance programs.

II. NTIA

See description of BTOP in the response to Question 1.

Appalachian Regional Commission

ARC began a broadband program in 2002 titled "Information Age Appalachia" (IAA). This program attempts to address four pillars: Access to broadband in rural Appalachia, Training and Education for broadband applications, E-Commerce activities for small Appalachian businesses and Technology-related job creation. Since the beginning of the program, a special emphasis was placed on trying to help rural communities obtain broadband service. ARC also has significant investments in distance learning applications for rural school districts and tele-health investments in rural health clinics.

Delta Regional Authority

iDelta -- In May 2007, the DRA released its information technology plan for the region. The plan, which was presented to the president and Congress, was developed in conjunction with Southern Growth Policies Board. The comprehensive plan to build information technology access and utilization in the region is titled "iDelta: Information Technology in the Delta." Goals of the plan are to improve education, enhance entrepreneurship and improve health care through the use of information technology. The plan provides research and data on the capacity and utilization of information technology in the region. There are recommendations for expanding the availability, usage and awareness of information technology.

The key IT-related areas, which the Authority concentrates on, are:

- Geographic Information Systems
- Tele-health
- Community Access
- Awareness
- Workforce Development
- E-Government
- And, the (proposed) DRA "iDelta Center".

For more information, please go to iDelta Report (2 MB) and iDelta Recommendations (4 MB).

In 2005, the DRA Federal Co-Chairman made the decision to include broadband projects including mapping, infrastructure and deployment as eligible projects under the basic public infrastructure category in the agency's federal grant program. That year, the Governor of Kentucky, allocated his entire federal grant program funding towards broadband deployment for 21 counties in Western Kentucky. For more information about DRA's federal grant program guidelines, ease go to http://dra.gov/pdfs/DRA%202009%20Eligibility%20Clarification%20Notes.pdf

- Since 2003, Congress has provided funding to DRA through the USDA Rural Community Advancement Program (RCAP). DRA has been able to use some of the RCAP funding to fund broadband related projects:

    - 2008, $670,000 for wireless broadband project in Coahoma County, Mississippi,
    - 2008, $75,000 for mapping projects in Arkansas,
    - 2009, $350,000 allocated for broadband projects,
    - 2010, $1.7 million spend plan proposed for broadband projects.

Additionally, DRA is now working on the following bases – DRA region-wide, DRA sub-region and state sub-regions to:

- DRA region-wide: help other states in the region grow their own technology entities, as most DRA states do NOT have an entity -- like Connect Kentucky or the Mississippi Technology Alliance -- with a formalized structure, strengths of partners and shared missions and visions. "Connect Arkansas" is a new entity with some old friends, which the Authority has used as an integral resource as it develops action plans.

- DRA sub-region: helping create a pilot plan, for example, in Delta counties to help grow IT-related assets and to then make best use of those assets (on a pilot/demonstration basis), in a process similar to the highly successful Delta Health Alliance model – which is so well received by federal agencies and Congress. Specifically, the Authority is working with a multi-state entity on a technology-based system for workforce training and development, which will elevate under-employed workers to higher-paying jobs and attract new talent, thereby boosting the economies of at least 3 DRA states. And, that program will be readily replicable for other DRA states to implement as well.

- State sub-region projects: some specific, much-needed (pilot/demonstration) projects – such as: wireless broadband over an under-developed county. The Authority has learned what it takes to accomplish these projects: planning, coordinating, mapping of assets and gaps, capital outlay and on-going operating costs – and, we are making progress in these areas.

Institute of Museum and Library Services

Institute of Museum and Library Services	Library Services and Technology Act Grants to States, Native American Tribes and Organizations that Primarily Serve and Represent Native Hawaiians	Provides funds for a wide range of library services including installation of fiber and wireless networks that provide access to library resources and services	Total program appropriation for FY 2008 $164,365,000 Including approximately $3 million spent on broadband deployment activities.

National Council on Disability

None

Question 3: Do any of the programs in question (1) or (2) deal specifically with rural broadband? If so, please describe how these programs deal specifically with rural broadband.

Department of Health and Human Services

I. Agency for Healthcare Research and Quality (AHRQ)

No.

II. Indian Health Service (IHS)

Universal Service Administrative Company (USAC)
Federal Communications Commission (FCC) Rural Health Care (RHC) Pilot Program

III. Health Resources and Services Administration (HRSA)

A. **Office of Health Information Technology/Office for the Advancement of Telehealth**

The Telehealth Network Grant Program (TNGP) indirectly supports the build out of the nation's advanced/broad band infrastructure by providing grant funds to rural health care networks to develop Telehealth services that use the infrastructure, thereby helping to build the market in these communities. Although the program does not directly pay for the build-out of the advanced telecommunications infrastructure (e.g., laying cable, fiber optics, microwave towers, etc), it does pay for the purchase of advanced telecommunications services. Moreover, HRSA requires its TNGP grantees to apply for the FCC's Universal Service Funds to enable them to stretch their grant dollars to provide Telehealth services in more communities by obtaining more affordable telecommunications services. This policy represents a synergy in federal programs that allows both to be more efficient and the taxpayer to receive greater benefit from its tax dollars.

The Telehealth Resource Center Grant Program (TRCGP) indirectly supports the build out of the nation's advanced/broad band infrastructure by providing grant funds for regional centers of excellence to assist health care providers and decision makers in the development of their Telehealth programs, including decisions regarding the purchase of advanced telecommunications/broad band services. These centers have also assisted providers in applying for the Universal Service Program and/or the FCC's Pilot Grant Program.

The Licensure Portability Grant Program (LPGP) indirectly supports the build out of the nation's broadband infrastructure by addressing a critical impediment to the utilization of telehealth networks. It seeks to provide grant support for state professional licensing boards to carry out programs under which the boards of various states cooperate to develop and implement State policies to reduce the statutory and regulatory barriers to telemedicine. Often, the most cost-effective way to utilize telecommunications and information technologies is across a state boundary to provide care when distance separates the patient from the clinician with the needed expertise. In this context, more widespread development of interstate telemedicine networks will assist underserved communities in overcoming their workforce shortages.

B. **Office of Rural Health Policy**

The following programs within ORHP utilize broadband to connect varying forms of Health Information Technology: Network Development, Delta Rural Health Initiative, Small Hospital Improvement Program, Small Health Care Provider Quality Improvement, and Critical Access Hospital Health Information Technology (CAH HIT) This broadband usage is through Health Information Exchanges, e-prescribing, Telemedicine/Telestroke, and health disparity reporting.

IV. Centers for Disease Control

No response

Department of Agriculture

All of the programs listed in response to Question 2 deal specifically with rural broadband. These programs provide financing (loan or grant) for broadband infrastructure in rural communities.

Department of Housing And Urban Development – Contact: Laura Grossman, Laura.S.Grossman@hud.gov, (202) 402-5541

I. Public & Indian Housing/Office of Native American Programs (ONAP)

No.

II. Office of Universities Partnerships

No.

III. Office of Rural Housing and Economic Development

Under the Rural Housing and Economic Development Program, a focus on broadband infrastructure projects for economic development is a possible eligible activity.

One of the menu of services under the Rural Gateway Clearinghouse is Quarterly Peer-to-Peer Conference Calls. For example, one of the past peer-to-peer conference calls focused on *"Telecommunications in Rural America."* The guest speaker for the session was the USDA Telecommunications director. There was discussion about broadband in rural communities.

Small Business Administration/Office of Advocacy

Not Applicable.

Department of Education

Office of Special Education and Rehabilitative Services

I. Office of Special Education Programs (OSEP)

See answers to Questions 1 and 2.

II. Rehabilitation Services Administration (RSA)

The AT Act prohibits spending funds directly on individuals.

III. National Institute on Disability and Rehabilitation Research (NIDRR)

Not applicable.

DoEd, Office of Elementary and Secondary Education

The programs listed in response to Question 1 do not deal specifically with rural broadband.

Department of the Interior

No. The Agency's programs are strictly limited to internal agency operations although ENAN-II supports some community learning centers.

Department of Commerce

I. EDA

There is very little need for urban broadband networks, so in general all EDA broadband projects are predominantly rural.

II. NTIA

No.

Appalachian Regional Commission

Many of our projects involve rural broadband applications. One of our early successes involved partnering with Motorola and Microsoft to expand a wireless broadband system in Delhi, New York. Our local partner was SUNY-Delhi. The Delhi campus sat on a hill overlooking the business district. Using a tower on the campus, broadband access via point-to-point wireless was transmitted into the business district. Early recipients were the Delhi Police Department, the State Dept. of Transportation garage facilities, the Community Center in Delhi and the public schools. ARC used this model to establish additional wireless systems in Glenville, West Virginia and Perryapolis, Pennsylvania. ARC has also been involved with establishing Wi-Fi systems in rural communities for use in tourism, expanding broadband into community centers and downtown business districts to provide wireless access for students that do not have broadband connections at home. ARC has helped to expand wireline broadband into remote industrial parks to assist with business attraction. We have also conducted numerous training courses throughout our region on demand aggregation, E-commerce applications and basic education on what is broadband and why does a rural community need it.

Delta Regional Authority

The majority of the communities in the DRA region are categorized as rural. As stated above, GAO affirmed that DRA's federal grant program led the nation with its "Rural Investment" intensity, as 77 percent of its investments went into rural areas.

Institute of Museum and Library Services

Not applicable

National Council on Disability

Not applicable

Question 4: Are there any impediments, either specific to your agency's existing programs or more generally, that you believe hinder rural broadband rollout? If so, please list and describe those impediments. Also, please propose any possible solutions.

Department of Health and Human Services

I. Agency for Healthcare Research and Quality (AHRQ)

Not Applicable

II. Indian Health Service (IHS)

If rural areas could be informed of the rural broadband initiative to install in their areas, they could also benefit from the funding available through the FCC RHC program to meet the monthly payments for the service.

Currently the IHS Areas and some Tribal communities are participating in the FCC RHC. The IHS Office of Information Technology (OIT) files on behalf of 6 IHS Areas for funding especially on the FTS telecom circuits. The remaining IHS Areas and Alaska conduct their own RHC filing. Participating Indian health care providers have benefited from RHC with regard to reduced telecom costs.

While the reduction of overall IHS FTS telecommunication costs can be measured considerably due to the amount of credits posted onto the FTS accounts, there are several issues that make the program tedious. The following notes assume a rural health care site can take advantage of both the rural broadband installation and funding from the FCC RHC program to alleviate some of their high-cost rural telecom expenses:

1. Required bidding process. In order to receive funding, the RHC program bidding requires that the application post for 28 days regardless of having a selected vendor in place. This is an unnecessary delay if sites want to keep their current carrier.

   Solution: Waive the 28-day bidding process for rural sites if they have already selected a carrier. If the Areas and sites want to look at more provider options, they can post for bids at that time.

2. The RHC program requires that the applicant use the service provider with the lowest cost bid that can give the essential services to the site. Most applicants or HCP under the FTS contract services cannot change providers. This is an IHS Area decision, so once rural broadband is made available, the sites have to pay for the service. In order for the health care sites to receive RHC funding in the form of a credit on their eligible circuits invoice or a refund check, the sites would have to take bids and be forced to make a choice of changing carriers every year.

   Solution: Once the rural broadband is in place, sites should be able to select the carrier of their choice to either keep the continuity, or select local providers that benefit the community economics even if the local provider charges a higher rate.

3. The FTS2001 program is a government designed plan to provide "government users with up-to-date, cost-effective, and easy to utilize telecommunications services," but at the same time another government agency, the FCC, states the site must change carriers in order to receive RHC funding.

Solution: FTS2001 users applying for RHC funding should be allowed a waiver of the bid process.

4. RHC funding or credits on FTS accounts are tedious to reconcile and nearly impossible to post further down from an IHS Area Agency Hierarchy Code (AHC) account. This is the point where failed FCC/USAC audits have occurred.

   Solution: Send funding checks directly to the sites. The sites can use the RHC funds to help pay for some of their broadband costs to ensure continuity of the service.

5. The USDA RUS Distance Learning and Telemedicine Program does not permit federal sites to be applicants. Also, the match required (and the scoring mechanism for it) really discourage Tribal sites from applying.

   Solution: Include IHS Federal sites as eligible sites for this program reducing or eliminating the match requirement. The IHS also recommends a tribal set aside, if possible, for this program. It would really stimulate telehealth service development, when funded.

III. Health Resources and Services Administration (HRSA)

The primary impediment to the deployment of broadband facilities with respect to HRSA's telehealth and HIT programs is the ability of the networks to financially sustain the networks and to gain clinical acceptance of remotely provided services, given initial costs of developing these services. This includes the costs associated with depreciation and maintenance of the physical facilities and the telecommunications costs as well as the human resources. Some of the impediments include:

- Clinical Acceptance (Integrating telemedicine into clinical practice: many applications improve access but not provider productivity)
- Financial Sustainability
- Telecommunications Infrastructure: High cost and/or limited availability of high speed telecommunications lines
- People Infrastructure: Lack of trained individuals with experience
- Organizational/Systems Infrastructure: Telehealth technologies are enabling technologies – The key is to have an efficient system
- Volume low for some applications, thus per unit costs remain high
- State Licensure laws restricting electronic practice across state lines (see the Licensure Portability Grant Program, above)
- Evaluation – Measuring outcomes/benefits of employing telehealth technology
- Standards Development Lag– Lag between the development of technology and our ability to develop appropriate technical and clinical standards (both private and public) to ensure quality of service.

With respect to the costs of the broadband deployment OHIT, working through its sister divisions, OAT and DSCA, make it a priority to provide technical assistance to its funded networks to address the critical issues of financial sustainability. Those activities include:

- **Monitoring of Grants.** Consistent with HRSA policies, OAT maintains a formal structure to monitor the performance of its grants and provide technical assistance. More specifically, each grantee is assigned a project officer and a grants management specialist, who are responsible for monitoring the grantees performance. Grantees are required to submit 6-month reports on their progress, as well as a final report summarizing the accomplishments under the grant. To facilitate monitoring of its grants, OAT has developed a web-based performance measurement system that is serving as a model for other federal agencies. Most recently, OAT has expanded the system to include some limited outcome measures.

- **Technical Assistance Initiatives.** OAT as a part of OHIT pursues a variety of strategies to facilitate technical assistance, in addition to the development of the Telehealth Resource Center Grant Program. Our experience suggests that although the use of electronic dissemination tools, such as listservs and web-sites are helpful in disseminating information to grantees, periodic face to face meetings are critical to building trust and a sense of sharing that facilitates peer-to-peer technical assistance, the most effective form of technical assistance we have found. The following are common TA strategies that we have employed:

    - Development of telehealth guidelines for establishing programs: OHIT has developed a HIT web portal on AHRQ's website to provide a variety of technical assistance tools, including those being developed by OAT and its grantees for Telehealth. Previously, OAT supported publication of a guide to getting started in telemedicine that provides guidelines in 11 application areas, including clinical specialties and home health, which were developed by our grantees and others based on their experiences (http://telehealth.muhealth.org geninfo/TAD.html).
    - Annual grantee meetings
    - Listserv for all current and former grantees to share problems and solutions.
    - OHIT Web-cast monthly conference calls with grantees to share lessons learned, update grantees on activities at the federal and state level of interest, and to develop joint projects to leverage limited resources, with an emphasis on joint evaluation strategies and performance measurement.
    - Web-site (http://telehealth.hrsa.gov)
    - Performance measurement feedback: Each grantee is provided a periodic report of their performance against the performance of all the grantees under the same grant program.
    - Grantee Directory/Profiles: An annual compendium of all grants funded in the reporting period (usually 2 years) that describes the projects and provides detailed charts on key characteristics, e.g., reimbursement, services offered, sites of service (hospitals, nursing homes, etc), transmission and selected technology information, demographies of populations served. The Directory is posted on the web-site annually. It is a very useful device for informing grantees and the public about telehealth programs in their communities funded by OAT.

SOLUTIONS:

The key to the development of sustainable telehealth/HIT networks and, thus, the ability of those networks to support the ongoing costs of broadband deployment is dependent on those networks to address the following issues:

Needs/Demand/Market Assessment - The extent to which the network:

- Meets the health care needs of the community and, critically, matches the demand for the services to be provided. Who else is providing the service? How do people in the area currently receive the service? Does specific and current data support the need/demand assessment? Has the local community provided input into the market assessment, and if so, are these users, decision-makers, etc?
- Develops a telehealth/HIT technological application that meet the need/demand.
- Telehealth technologies are the most effective alternative to provide the services.
- Is compatible with the health care resources/expertise/telehealth resources that are are available. Does the proposal build on those resources or duplicate them?
- Will be utilized and supported by the local citizens.

Purchasing Equipment/Software/Telecom Services - A Thorough Assessment - The extent to which the network:

- Deploys equipment/software that will meet all current and emerging standards for interoperability/data exchange
- Provides for a network design that most effectively utilizes the available and projected telecommunications infrastructure.
- Is designed taking into consideration all technological options, and deploys the most cost-effective option to provide the healthcare services. (e.g. costs versus benefits)
- Allows for upgrades and can communicate with other networks. (e.g., avoiding proprietary hardware and software, i.e., "open systems")
- Can be operated and maintained with available resources. (In house versus outside technical support)
- Can easily be used and will be used by clinicians and patients.

Sustainability – the extent to which the network:

- Can aggregate telecommunications demand and economies of scale. Networks must strive to serve various venues or provide for multiple uses and obtain revenue for ancillary uses. (e.g., hospitals, schools, community facilities, business, local government)
- Will generate sufficient revenue or achieve sufficient cost savings to cover telecommunications charges, equipment depreciation, maintenance and other system-related costs.
- Can develop an effective long term strategic plan. (e.g., Does that plan consider the telehealth/HIT program as a revenue or a cost center?)
- Provides for a maechanism to monitor and evaluate performance and provide any "mid-course corrections" or changes as conditions warrant.
- Provides for a plan for loss of key employees, a plan for sustaining and increasing clinical champions.
- Evidences leadership that understands reimbursement and funding opportunities, as well as sources of revenue for multiple users.
- Provides for a plan for ongoing local community support and collaboration with other entities? (healthcare providers, businesses, educational institutions, individual users, political leaders, community advisory groups, etc.).
- Facilitates an ongoing public relations and marketing effort.

IV. Centers for Disease Control

No Response

Department of Agriculture

The Agency improves the quality of life in rural America by providing investment capital for deployment of rural telecommunications infrastructure. In order to achieve the goal of increasing economic opportunity in rural America, the Agency finances infrastructure that enables access to a seamless, nationwide telecommunications network. With access to the same advanced telecommunications networks as its urban counterparts, especially broadband networks designed to accommodate distance learning, telework, and telemedicine, rural America will eventually see improving educational opportunities, health care, economies, safety and security, and ultimately higher employment. The Agency shares the assessment of Congress, State and local officials, industry representatives, and rural residents that broadband service is a critical component to the future of rural America. The Agency is committed to ensuring that rural America will have access to affordable, reliable, broadband services and to provide a healthy, safe, and prosperous place to live and work.

One of the main impediments to the full deployment of broadband infrastructure in rural areas is the fact that deployment to rural areas is often more costly than in non-rural areas, usually due to lower density and geographic considerations. The technological complexity and the large amount of capital required to deploy widely have also been impediments. Many projects are not profitable for several years after implementation. Some areas of the country are very competitive, with numerous broadband providers, while other areas are totally unserved. Although a priority is given under RUS financing for unserved areas, it has been difficult for applicants to make a solid business case for just unserved areas. Many rural communities are eager to have access to broadband but are unable to attract service providers.

Department of Housing And Urban Development

I. Public & Indian Housing/Office of Native American Programs (ONAP)

In general the impediments are the remoteness of the areas where broadband is needed, as well as the low density of population.

II. Office of Universities Partnerships

No.

III. Office of Rural Housing and Economic Development

Not applicable

Small Business Administration/Office of Advocacy

Advocacy does believe that there are impediments to rural broadband rollout and filed comment with the FCC on Rural Broadband Issues. These comments will be attached.

Department of Education

Office of Special Education and Rehabilitative Services

I. Office of Special Education Programs (OSEP)

Cost is a major impediment. As described above, funding under IDEA might make a small contribution to developing rural broadband infrastructure, but the policies must be explored to determine the circumstances, if any, under which IDEA funding can contribute. Explorations of cost must consider not only the initial installation of broadband, but also the training, maintenance and support required for continued functionality.

Access is another impediment, and all aspects of access must be monitored. For example, broadband access devices such as computers or televisions must provide accessibility features such as text-to-speech, captioning, enlargement, adapted keyboards, etc. However, hidden features of the broadband transmission network must also be monitored for access. For example, a certain portion of the bandwidth needs to be preserved for video description and captioning. Modern compression technologies have reduced the amount of bandwidth needed for these services, but have not eliminated the requirement completely. Another example involves the use of streaming video to deliver signing for the deaf, in which case sufficient speed and resolution must be provided to ensure that signs are interpretable. Factors of cost and competing uses may tend to limit the accessibility capacity of the network, and should thus be monitored and controlled.

II. Rehabilitation Services Administration (RSA)

As broadband technology is provided to more rural communities, the AT programs can address the accessibility part of the equation for persons with disabilities. AT programs should be involved in the planning stages so all can benefit from the implementation. Representatives of the AT Act programs can/should serve on technology-related advisory committees in their states or on any state-level bodies that are planning for improving access to IT for the general population. The AT program representative's role on such a body would be to ensure that the plans incorporate the needs of individuals with disabilities to access IT and meet requirements such as section 508 and section 504 of the Rehabilitation Act. For example, if a rural community gets broadband access in their local library building or community center, that building needs to be accessible to people with disabilities. The computer station also needs to be accessible and the computer needs to be compatible with software that makes the internet and other programs accessible to people with disabilities. The AT programs can provide this expertise and technology.

Broadband wireless has particular benefit for people with disabilities in rural areas. Wireless access allows transmission to homes without running wires or cables to each and every house allowing more homes to receive broadband signals in less time for less money. Broadband wireless allows emergency transmission (including video) for people with deafness or hearing loss, GPS for people with blindness or vision loss, reaching help for people with mobility impairments, communication in case of disasters or emergencies. It allows people with limited function to use technology in any room, even any house/home without rerouting cables and relocating hardwired devices. The potential for emergency preparedness and disaster recovery cannot be overstated. Overall, the future assistive technology potential for people with disabilities is endless if they are not tied to wires.

III. National Institute on Disability and Rehabilitation Research (NIDRR)

The Digital Divide still exists for rural residents with disabilities. The latest available data show that only about a quarter of the population of people with disabilities living in non-metropolitan counties use the computer at any location (http://rtc.ruralinstitute.umt.edu/TelCom/Divide.htm).

NIDRR programs are not creating impediments to broadband access, but they are suffering from them. When grant project activities are designed to incorporate online tools which require high broadband, people without these connections are being left out. For example, people with disabilities can be categorically excluded from online surveys and once that happens, it is as if their needs and issues cease to exist. They become invisible in an increasingly online world. Similarly, NIDRR researchers are employing state-of-the-art applications that require large capacity transmissions that are not universally available. For example, one project is using Web 2.0 application of Second Life to conduct training workshops, and to compare this delivery platform with similar content delivered in other formats. Such exciting applications are unlikely to reach many rural residents with disabilities any time soon because they lack high speed home connections.

The 1995 NTIA/ESA digital divide report showed the rural poor (income less than $10,000) having the lowest rates of computer ownership. Americans with disabilities are often among the poorest and least-employed and they do not have workplace Internet access may be unavailable because people with disabilities are less likely to be employed.

Locations for Internet access may be limited. Users of assistive technology and/or customized configurations can only access the Internet where these accommodations are available, which limits their access at public libraries, community centers, or in the homes of friends. Public locations may not be physically accessible to people using mobility devices. 24% of people with disabilities use the Internet at home and about 30% report using it from any location. Half of people with no disability use the Internet at home and more than 60% use it from any location.

Internet content may be frustrating – many web sites are not accessible to people using assistive technology such as screen readers. Federal government web site accessibility is mandatory, but court rulings on Americans with Disabilities Act applicability to non-government web sites have been inconsistent and contradictory.

People who are deaf have used TTYs for years. However, with many people switching to IP communication, those who do not have broadband connections are stuck using the older and incompatible TTY technologies. They use dial-up for Internet but cannot use that for incoming text calls. Rolling broadband out to rural communities would surmount this problem and allow rural users to be compatible with others and take advantage of the added capabilities of IP communication as well (i.e. IP relay). Almost all communication by phone by deaf individuals is conducted through Video Relay Service (VRS), in which deaf individuals can see an interpreter at a remote location signing a call to a hearing person, and through point-to point video connection to other deaf individuals (instead of TTYs) to chat via signs and/or lip-reading with voice. The video technologies require broadband to allow for video streaming. For those who can not afford the cable or DSL monthly charges and for those in rural areas without such access to these types of services, communication continues with the traditional TTY-to-TTY calls and TTY relay calls, supplemented or mostly replaced by dial-up access to IM chats/relay service and e-mails.

Regarding telerehabilitation and its potential for rural residents with disabilities – The Internet has becomes suitable as a platform for demanding interactive services, such as videoconferencing, due to the advancements in broadband speed and access. The drawbacks of the Internet in the past (e.g. potentially higher packet loss and low quality of service) has become less of a factor as the speed and quality of the Internet increase. The Internet has tremendous potential as the standard platform for future multimodal telecommunications. An integrated telerehabilitation service that includes teleconsultation, e-health, and teletherapy can be delivered using multimodal applications (videoconferencing, personal health record access, personalized consumer health information, remote monitoring, etc.) over a single communication channel. A related obstacle is the issue of reimbursement.

DoEd, Office of Elementary and Secondary Education

There are no impediments, either specific to the U. S. Department of Education's existing programs within the Office of Elementary and Secondary Education that hinder rural broadband rollout since none of the programs fund the deployment of broadband activities.

Department of the Interior

Repurposing of the Universal Service Fund, especially the eRate program to enable service provider driven deployment of services without the extreme level of effort required to acquire funding from the applicant's side.

Broadband over powerline should be avoided due to the documented interference with first responder's radio communication systems (electromagnetic propagation).

Department of Commerce

I. EDA

To answer this question, EDA spoke to two of our field representatives, each of whom had very different experiences due the nature of the projects involved. Anne Cavelier, our WV/MD Economic Development Representative, has been working with the State of Maryland and other entities to create a broadband network that links the Eastern Shore to rural western Maryland, crossing the Chesapeake Bay in the process. This project has had lengthy delays for two primary reasons:

1) The project plan calls for tunneling under the Chesapeake Bay, which will require permits from the EPA, the Army Corps of Engineers, and state environmental regulators. Many environmental issues remain to be resolved, which is slowing the process.
2) The project plan initially called for the broadband fiber to be laid underground, crossing private land. This entailed negotiations with hundreds of private land owners, many of whom were not amenable to granting rights-of-way on their land. As a result, the recipients eventually switched strategies, deciding to bury cables beneath road shoulders, as these are on existing public rights-of-way.

EDA's Economic Development Representative for VT and NY, John Marshall, has worked on a few smaller projects in Northern Vermont and New York (the smallest involving three counties and the largest involving six). In all of these projects, above-ground public rights-of-way (generally telephone lines) have been utilized. EDA builds a ring of fiber (ensuring redundancy, unlike a line of fiber, which can be cut like a power line) and private providers build the "last mile" to extend the fiber connection to individual institutions or households. The fiber rings are owned by the counties but leased to private companies. In order to limit environmental issues, fiber is laid along above-ground river crossings, such as bridges or telephone lines.

Based on these experiences, EDA recommends the following best practices:

1) Ensure that recipients have a strong project plan that involved the relevant stakeholders in mapping the network and determining the project scope from the beginning. At the outset, the state department of transportation and electric cooperatives and other publicly-owned utilities should provide maps of existing public rights-of-way. The state environmental protection agency should provide information on required permits, as well as which routes would minimize crossing environmentally-sensitive areas. State emergency management agencies, state law enforcement agencies, and even (on the border) the Immigration and Naturalization Service (INS) should be involved in specifying any requirements they have, such as communications encryption requirements. In addition, these agencies often have detailed maps and plans for networks to link first responders ready to go, which may shorten the project planning process. Finally, they may be able to contribute project funds; EDA did one project along the northern border in which INS contributed funds.
2) Ensure that recipients have adequately demonstrated demand to attract private providers to construct the "last mile" to individual institutions and households.

3) For projects that are not "shovel ready," consider awarding two grants—one grant for a design and feasibility study to map the route, estimate demand, identify any required permits and the effort involved in obtaining those permits, and identify any rights-of-way issues and ways to mitigate rights-of-way issues. The second grant would be for actual construction. The benefit of such a strategy is that it increases the likelihood that adequate attention and resources will be focused on the critical project planning phase. It also reduces risk to the federal government, since the government is not obligated to fund construction if the design and feasibility study identifies serious legal or environmental impediments.
4) If the project crosses state lines, ensure that all parties involved have a clear understanding of any differences in state regulations that will affect the project.
5) Prioritize projects that are able to utilize above-ground, publicly-owned rights-of-way; that have detailed project plans available that were developed in concert with all counties involved, as well as the state departments of transportation, environmental protection, emergency management, and other relevant entities; that will have staff with a mix of project management, civil engineering, electrical engineering, and mechanical engineering skills; that have strong support from stakeholders; and that have estimated demand sufficient to make the project successful.

II. NTIA

The principal impediment appears to be the high cost of deploying broadband infrastructure in remote and sparsely populated rural areas. In many circumstances, the business case is not strong enough to justify the investment. Over the years, Federal and State governments have developed subsidy programs to reduce the costs of serving rural areas, such as the FCC's Universal Service high-cost fund and USDA's telecommunications loan and grant program. BTOP is the most recent example of those government subsidy programs.

Appalachian Regional Commission

Attracting service providers to serve rural areas has been a major impediment. The more rural the area, the more difficult the task is to accomplish. It is simply a matter of business case economics. There is also the issue of using federal funding sources to provide a system that will ultimately end up in competition for customers with privately financed systems. For example, DSL may be available in a portion of a county – but the service is not available throughout the county. The county would like funding assistance in constructing a county wide wireless system. The wireless system will cover the same area where the DSL service is already available – and since the wireless system is subsidized by grant funding, the price for the broadband service could be less than the DSL service. Customers may drop the DSL service to take the lower priced wireless service.

Solutions to these problems include, in the first case, providing a subsidy that will reduce the cost of deployment thereby changing the breakeven points in the business case analysis and finding lower cost solutions to rural wireline broadband service. Our solution to the second case has been trying to create public-private partnership arrangements to reduce the likelihood of legal

challenges. We try to let the service providers who operate in the areas know when we are looking at expanding broadband and try and find ways to work together whenever possible.

Delta Regional Authority

- Local entities' inability to match federal dollars – so, either waive match requirements or allow appropriate agencies to serve as that state or local match.
- Local leadership too often do not understand the grant-procurement process – create teams to work with local entities to develop that capacity, to empower localities to succeed with grant-procurement processes.
- Insufficient supply-side information available to exploit by local entities and the private-sector.
- Insufficient understanding by local leadership – formal and informal – as to benefits of IT assets – create teams to increase that local understanding, increase local demand to help satisfy private-sector business requirements.
- E-Government – each public/education entity should have a working, citizen-serving webpage
- A regional approach to IT deployment to achieve greater synergies rather than the typical piecemeal approach to specific localized development – make greater use of regional development commissions.

Institute of Museum and Library Services

Not applicable

National Council on Disability

Impediments

- Gap funding for carriers who want to make an initial investment in developing critical infrastructure, to jumpstart a sector.
- Affordable lease rates for new carriers' use of existing infrastructure.
- Affordable and accessible wireless reception and assistive technology devices for people with disabilities.
- Rural communities generally often have insufficient or only enough capacity to conduct the administrative and regulatory requirements of their own affairs at current property tax levels.
- Delivery of wireless Internet services requires technical expertise that is rarely, if ever, among the qualifications of town clerks, administrators or managers.
- Officers of rural communities likely do not understand basic telecommunications issues.

Possible solutions

- Develop and expand public and private funding sources to assist with initial capital costs to develop high speed internet capacity in rural areas that will extend service beyond existing infrastructure constraints.

- Explore subsidies for bulk purchase of wireless reception devices on individual residences and businesses.
- Facilitate shared infrastructure to spread capital costs across public and private sectors and across telecommunications service needs (broadband, cellular, radio).
- Consider use of universal service E-Rate – and other public subsidies -funds for equipment costs, infrastructure development, assistive technology purchases.

Question 5: It could be beneficial to have a unified map to support a broad range of governmental and private sector activities. Please describe any data regarding broadband service that your agency collects in administering its programs, such as known locations of public or private facilities with broadband service. Please also list and describe your agency's mapping or "geolocation" information sets (e.g., broadband, highways, hospitals).

Department of Health and Human Services

I. Agency for Healthcare Research and Quality (AHRQ)

Not Applicable

II. Indian Health Service (IHS)

See attached spreadsheet for sites and addresses.

III. Health Resources and Services Administration (HRSA)

[To be supplied]

IV. Centers for Disease Control

Provides a number of maps depicting broadband availability at health institutions in various States and other locations.

Department of Agriculture

RUS Broadband III GIS Mapping Solution

Broadband III – GIS Mapping Requirements

The 2008 Farm Bill requires that a mechanism be in place, enabling the Agency to publish a Public Notice Filing (PNF) for each prospective applicant seeking funding. It also required that the PNF provide information on the prospective applicant's proposed Service Area (i.e. maps of the proposed Service area) along with the number of households that the applicant intends to serve and that the applicant contends are without access to broadband service (within their proposed Service Area).

Incumbent Service Providers (ISP) must also have the capability to submit a Public Notice Response (PNR) to the PNF. This must also include a map of the areas within the applicant's proposed Service Area(s) that have access to broadband data service, provided through the respondent.

Broadband III – GIS Mapping System Life Cycle

The following provides a sequencing of how the Broadband Program envisions the use of the GIS Mapping solution:

1) An applicant applies under the Broadband Program. As part of their application they are required by the Broadband Program to provide maps which show their proposed Service Area(s) that will be covered by their project.

2) The Broadband Program requires that a web based solution for creating shape or .sde files be accessible to potential Broadband Program applicants so that they can create their Service Area maps through the system.

3) Broadband Program staff will review the proposed maps to determine whether the proposed Service Area(s) fail some basic eligibility requirements stipulated by the Farm Bill, including population/urban area characteristics or infringement upon an existing Rural Development borrower's service territory. This will be completed by overlaying existing maps of ineligible areas onto the proposed service area maps. This will be completed on RD staff desktops.

4) For Service Areas that have been found to not obviously fail the basic eligibility requirements, Broadband Program staff will create a PNF based upon the information contained in the application. The LFN must have links that the public will use to access the service area maps.

5) There will be a subscription system to alert interested parties via email whenever PNFs are posted on the website.

6) Should a party view an PNF and realize that a proposed Service Area or Service Areas infringe upon their existing broadband service territory, they will have the ability to create a Legal Notice Response (PNR) to each Service Area under the PNF by accessing the service area maps created by using the web based tool referenced above. The Farm Bill stipulates that the Broadband Program may not lend into a Service Area with three or more existing Incumbent Service Providers, which are defined as providers who serve at least 5% of the households within any contiguous Service Area. The Farm Bill also stipulates that the Broadband Program may not lend into a Service Area where less than 25% of the households in the proposed Service Area is offered broadband service by more than 1 Incumbent Service Provider.

7) A respondent will create an PNR for each Service Area map in the PNF which infringes upon their existing broadband service territory.

8) The Broadband Program must have the ability to overlay the PNR maps onto the PNF maps to determine the unserved areas and the areas with three or more service providers.

Department of Housing And Urban Development

I. Public & Indian Housing/Office of Native American Programs (ONAP)

ONAP does not have any mapping tools.

II. Office of Universities Partnerships

No, we do not gather information on broadband.

III. Office of Rural Housing and Economic Development

Not applicable.

Small Business Administration/Office of Advocacy

Advocacy was tasked by Congress to conduct a forthcoming study on small businesses and broadband which may incorporate mapping information to a certain extent.

Department of Education

Office of Special Education and Rehabilitative Services

I. Office of Special Education Programs (OSEP)

Not applicable

II. Rehabilitation Services Administration (RSA)

Not applicable.

III. National Institute on Disability and Rehabilitation Research (NIDRR)

While it is essential to understand the distribution and locations of public or private facilities with broadband service, it is equally important to understand the spatial distribution of people who need access to broadband services. Rural America is particularly challenging for many reasons, including the multiple definitions used to define where "rural" is. Baseline measures used to show changes in distribution need to include not only the spatial distribution of broadband resources but also how many people actually have access to and are using broadband resources when available.

Having already established that rural residents with disabilities still face a digital divide, it is particularly important to include them in unified mapping projects. At least one NIDRR sponsored project has included Geo-coded datasets for people with disabilities nationally. Rural RRTC's website: DisabilityCounts.org is based on US disability demographic data from the 2000 Census. Datasets are geo-coded at the county level. Disability mapping is done using ESRI ArcGIS software so these county level datasets can be linked to other geo-coded datasets. Other RRTC datasets are geo-coded at the ZIP-code level. These include: US Centers for Independent Living (700 locations) and the nearly 5000 sub-recipients of the Federal Transit Administration's section 5310 transportation program for elderly and disabled individuals.

This type of data should be included in broadband mapping activities, both through NIDRR sponsored projects and through whatever unified mapping efforts are supported by the rural broadband initiatives. Unless people with disabilities and accessibility of facilities and broadband services are specifically included for both urban and rural areas, they are very likely to be overlooked – and treated as if they did not exist.

DoEd, Office of Elementary and Secondary Education

Not applicable

Department of the Interior

The Department maintains an accurate inventory of its deployed broadband inventory and related assets. Due to the nature of this information, it is available upon request provided the requester adheres to certain non-disclosure limitations. Please contact the Office of the Chief Information Officer's Enterprise Infrastructure Division at 703-648-5555 for more information.

The Department's US Geological Survey (USGS) is the primary provider of geolocation mapping services across the federal government. Specific USGS map servers can be found at http://www.usgs.gov/science/science.php?term=1234. The USGS also provides for a user configurable mapping tool that can overlay various datasets for a customized view. This can be accessed at http://www.nationalatlas.gov/.

Department of Commerce

I. EDA

EDA does not have any comprehensive geolocation information sets. Some applicants choose to submit a map showing existing broadband networks in their proposed project area as part of their application, but it is not required.

II. NTIA

NTIA does not conduct any mapping activities at this time. However, the Recovery Act requires NTIA to "develop and maintain a comprehensive nationwide inventory map of existing broadband service capability and availability in the United States." (Section 6001(l)).

Appalachian Regional Commission

ARC has not been directly involved with broadband mapping activities throughout our region. We have funded some state efforts and broadband mapping – such as the Connect Kentucky mapping project – but we have not undertaken mapping of broadband availability within the region.

Delta Regional Authority

The iDelta report provided sets of data of accessibility and utilization for its DRA eight states: http://www.dra.gov/pdfs/iDelta%20report%20032207.pdf.

Institute of Museum and Library Services

IMLS has geographic information on each of the country's branch libraries that allow the agency to map all branch locations as point files. We also have data on the number of internet access terminals available, at the library system level. We are currently in talks with the Bill and Melinda Gates foundation to obtain data on broadband internet connection speeds and costs in all the country's public library branches. Our agency also regularly uses the results of the American Library Association's 2007-2008 Libraries Connect Communities study, which collected data on broadband and wireless speed and connectivity from a sample of the nation's public libraries.

Agency analysts are capable of running statistical and geo-spatial analysis on library and other data files and are able to provide support in identifying program targets if needed. Staff also have experience using USDA data to identify metro/non-metro and rural areas. We have also merged Public Library Survey data with OMB and USDA county status codes to identify library resources that fall within defined rural areas.

National Council on Disability

Not applicable

Question 6: Please suggest ideas to promote interagency coordination for policies, programs, and services for a comprehensive rural broadband strategy.

Department of Health and Human Services

I. Agency for Healthcare Research and Quality (AHRQ)

The best way to coordinate rural broadband efforts taking place within the federal Department of Health and Human Services would be through the newly authorized Office of the National Coordinator for Health IT.

II. Indian Health Service (IHS)

Leveraging the buying power of the government with telecommunications vendors can persuade them to build out better broadband services for rural areas with limited services. By purchasing services off the new Networx contract, the government is requiring certain build outs in rural areas. The contract is large enough for the prime vendor to single price a circuit whether rural or metro.

If government agencies would increase their bandwidth from T1's to broadband in rural areas, this would require vendors to build out fiber in rural areas. They could then offer the fiber to other agencies, tribal governments and organizations, as well as the public. By buying more services, the government agencies would help build out areas that have little broadband services.

The government agencies should continue to drive application adoption that drives broadband to rural sites. Applications like telehealth and video teleconferencing drive the adoption of broadband, and thus increase the rural broadband rollout.

III. Health Resources and Services Administration (HRSA)

ORHP has done and continues to do extensive work in the area of the definition of "rural." This is critical area for collaboration.

The Federal Joint Working Group on Telehealth (JWGT) provides another avenue for collaboration at a staff level. It should be noted that the JWGT has facilitated a long time established working relationship among representatives of Rural Utilities Service, The Department of Commerce, Department of Health and Human Services, and other federal agencies throughout the federal government, all which are involved in finding the most effective way to deploy technology to provide healthcare to underserved populations. This working group provides the most effective mechanism for USDA, Commerce, and DHHS to build on any already established working relationship.

IV. Centers for Disease Control

No response

Department of Agriculture

The Federal government could assist rural communities and service providers with information on successful models of broadband deployment, case studies of economic development efforts related to broadband, and so on. Assistance should be provided to rural communities to help them with identifying the broadband opportunity in their community and attracting broadband service providers.

Department of Housing And Urban Development

I. Public & Indian Housing/Office of Native American Programs (ONAP)

Work with established organizations like the Denali Commission to organize and coordinate the smaller organizations with limited resources.

II. Office of Universities Partnerships

To include the American Indian Higher Education Consortium (AIHEC) in discussions on broadband needs for Tribal Colleges and Universities as they have already done significant work in this area.

III. Office of Rural Housing and Economic Development

Through HUD's Office of Rural Housing and Economic Development Rural Gateway Clearinghouse, information can be disseminated by telephone inquires, the listservs or at the website about funding opportunities or general information regarding HUD and other federal partners.

Small Business Administration/Office of Advocacy

Regular interagency meetings, shared data among the agencies, and shared policy input would help interagency coordination on rural broadband.

Department of Education

Office of Special Education and Rehabilitative Services

I. Office of Special Education Programs (OSEP)

Agencies should geographically map the projects and service providers they fund in rural areas to identify locations that need improved broadband coverage and the possible points for shared access development.

Agencies should analyze their laws, regulations, and policies to determine how they can contribute to interagency rural broadband efforts.

Public-private partnerships should he explored. Ultimately, a market model in which rural broadband becomes a profitable enterprise may hold the most promise. Small businesses may play a large role here.

Agencies should fund (independently or collaboratively) projects to develop and demonstrate the use of broadband to meet agency missions in rural areas. These demonstrations will stimulate rural use of broadband technology and increase its economic viability.

II. Rehabilitation Services Administration (RSA)

RSA Centers for Independent Living (CILS) could be used as hubs for accessible community broadband access for many rural residents with disabilities. RSA administers the CIL program and there are close to 400, funded in part by RSA, and close to 300 others located in the US. CILs are consumer-controlled, community-based, cross-disability, nonresidential, private, nonprofit agencies that are designed and operated within local communities by individuals with disabilities. CILs provide an array of independent living services, including the core services of information and referral, independent living skills training, peer counseling, and individual and systems advocacy.

III. National Institute on Disability and Rehabilitation Research (NIDRR)

There is a great need for a public accessibility infrastructure to make access affordable by all Americans as well as to make cross-disability access possible and affordable in libraries, schools, and public access locations (community centers etc.) Interagency coordination and collaboration on this will be necessary if the new broadband initiatives and the Internet in general are to be accessible to people with disabilities, literacy barriers, and those who are older. The ICDR and the Access Board may be a good place to start.

Data collection on broadband penetration should include disability questions which have already been cognitively tested. NTIA has already included these questions in previous telecom surveys. Since the NTIA telecom surveys are done as supplements to the DOL/BLS CPS (Dept of Labor, Bureau of Labor Statistics, Current Population Survey) surveys, the new disability questions recently added in the CPS might be able to be used, instead of having NTIA include specific questions in their telecom Supplement.

Recommended interagency vehicles to address rural broadband access for people with disabilities are the Access Board and Interagency Committee on Disability Research.

DoEd, Office of Elementary and Secondary Education

- Continued interagency meetings

- Inventory of programs and services across agencies that provide and deliver digital content and professional development using broadband and/or have applications requiring broadband access.

Department of the Interior

Repurpose the Universal Service Fund to enable the service providers to provide low cost access.

Permit each Agency to leverage its Spectrum Allotments in providing wireless broadband access

Assemble an interagency team to develop overarching strategy and demonstration pilots.

Leverage DOI's relationship with rural communities, especially tribal communities, the Indian Education Network, and experience with provisioning services in rural areas to assist with coordinating the furtherance of broadband access.

Department of Commerce

I. EDA

Coordinate all agencies that have jurisdiction over public rights-of-way to document and map these rights-of-way. Create an MOU with EPA, the Army Corps of Engineers, and any other agencies that may be involved in issuing permits related to the construction of broadband networks to streamline and centralize the permitting process. Involve the Immigration and Naturalization Service in projects along the northern and southern borders.

II. NTIA

NTIA is currently coordinating with USDA in the implementation of BTOP. NTIA is also working closely with the FCC on broadband mapping issues.

Appalachian Regional Commission

I believe there has been recent effort to create an interagency broadband task force to discuss specific program activity and to share best practices. I think this is a great first step in sharing information.

Delta Regional Authority

- The continuation of the National Economic Council's interagency meetings is a great beginning.
- DRA is working with the 44 "local development districts" within its footprint in a similar manner.

Institute of Museum and Library Services

To avoid duplicative efforts and increase efficiency, include library service public agencies at the federal, state and local level in interagency efforts.

National Council on Disability

Develop and interagency working group whose membership is staggered or layered and cumulative, based on critical community functions. For example, start the interagency group to focus on emergency service functions. Interagency coordination works best, and is most effective, when there is a shared mission and set of goals to work from. Add in new common core functions deliberately and successively.

Question 7: Please make any other suggestions that you believe should be a part of the nation's comprehensive rural broadband strategy.

Department of Health and Human Services

I. Agency for Healthcare Research and Quality (AHRQ)

None

II. Indian Health Service (IHS)

Very few funds have been released through the RHC Pilot Program. They have requested sustainability plans that really aren't practical and are burdensome. No such requirement is in place for the longstanding USAC program where urban-rural difference is how things are determined. If the main USAC program was not in place, many sites could not afford the bandwidth; the RHC Pilot program has significant unspent funds every year due to this requirement. Full sustainability plans seem impractical and are obstacles to extending broadband reach.

Solution: The IHS recommends that greater emphasis be placed on sustainability in context. Some sustainability plans need the USAC funds.

III. Health Resources and Services Administration (HRSA)

According to the Federal Register Notice on page 10717, It is noted that ARRA, section 6001(b), outlines five (5) purposes for the Broadband technology Opportunities Program (BTOP) relating to the National Telecommunications and Information Administration's (NTIA) activities under ARRA. In the context of the first two purposes, which include providing access or improved access to broadband service to un-served and underserved areas, respectively, from our perspectives, the salient provision is purpose (3) (A): to "..... provide education, awareness, training, access, equipment and support to schools, libraries, medical and healthcare providers, community colleges, and other institutions of higher education, and other community support organizations and entities to facilitate greater use of broadband service by or through these organizations.

Further, the Federal Register beginning on page 10719 outlines USDA's Rural Utilities Service (RUS) charges relating to broadband deployment under ARRA. We understand that grant funds provided through ARRA will complement RUS' existing Broadband loan program and that RUS seeks to effectively coordinate its efforts with those of the BTOP.

The following comments are offered as a beginning point for dialog:

1. We support the concept of developing a "broadband map" (BM), which would inventory existing broadband transmission capabilities. The BM:

- Should assist in guiding deployment of broadband facilities such that new facilities deployed under ARRA will not duplicate existing broadband telecommunications facilities.
- Should be developed at the state level as part of each state's respective comprehensive state telecommunications plan to identify un-served or underserved areas.
- Should identify current and projected utilization of existing telecommunications facilities by residential, commercial, and public entities, including entities providing educational and medical services.

2. In developing the BM, we wish to work, in cooperation NTIA, RUS, and with State Health Departments and other relevant State agencies to identify safety-net providers and underserved communities, which may include, but not be limited to, the following:

- Areas served by DHHS-Supported Community Health Centers - Health Centers refer to all the diverse public and non-profit organizations and programs that receive federal funding under section 330 of the Public Health Service (PHS) Act, as amended by the Health Centers Consolidation Act of 1996 (P.L. 104-299) and the Health Care Safety Net Amendments of 2002 (P.L. 107-251). They include Community Health Centers, Migrant Health Centers, Health Care for the Homeless Health Centers, and Primary Care Public Housing Health Centers.
- Areas served by Federally Qualified Health Centers – These include federally and non-federally-funded health centers that have status as federally-qualified health centers under section 1861(aa)(4) or section 1905(l)(2)(B) of the Social Security Act (42 U.S.C. 1395x(aa)(4) and 1396(l)(2)(B), respectively).
- Full and partial Health Professional Shortage Areas (HPSAs).
- Full and partial Medically Underserved Areas (MUAs).
- Mental health and/or dental HPSAs.

3. We believe it is critical that new broadband facility construction be built to integrate with existing networks in the most cost effective manner so as to avoid unnecessary expenditures. Thus, such decisions should be made in close consultation with local telecommunications providers in conjunction with appropriate state utility authorities and in accordance with a state telecommunications plan.

4. Funding decisions made with regard to deployment of new broadband facilities for healthcare purposes should be made with the following criteria:

A. Effective Demand Assessment – The extent to which the project evidences:

- Demand for health care services to be provided,
- Usage of broadband facilities to be deployed.

- Provides for multiple uses of the network that will aggregate demand for telecom services (e.g., health care providers, public and private entities, individual subscribers).
- Local community input and tangible support for the network facility construction (i.e., the extent to which local communities will utilize and financially support the network)
- Strengthening existing health care resources (as opposed to duplicating health resources).
- Quantifiable benefits such that the capital investment and operating expenses can be economically justified.

B. Sustainability– The extent to which the project evidences:

- Ability to generate sufficient revenue or cost savings to be sustained financially, evidenced by a strategic and financial plan.
- Multiple uses (hospitals, schools, community facilities) that can provide revenue to support and maintain the broadband facilities.
- A plan for ongoing local community support, collaboration with other entities (community advisory groups, larger healthcare providers) and financial support.
- An ongoing public relations and marketing effort to support and expand usage of the project.

5. Specific Programmatic Interests. DHHS supports projects that integrate the following organizations and/or initiatives as beneficiaries of broadband facilities:

- Community-based organizations.
- Tribal areas.
- Areas served by Health Centers, including Federally Qualified Health Centers
- Entities proposing to develop plans for, or to establish, telehealth networks that provide clinical services, including mental health, public health, long-term care, home care, preventive health, or case management services.
- Projects that will coordinate among federally funded initiatives and with other relevant projects in the areas, communities, and populations to be served through the deployment of broadband facilities.
- Projects that promote local connectivity within areas, communities, or populations to be served through the deployment of broadband facilities.
- Projects that integrate the use of Electronic Health Records (EHRs) within telehealth networks or other health information technology (HIT) networks to be served by the deployment of broadband facilities.
- Projects that address, as appropriate, achievement of Healthy People 2010 objectives. This document can be found at http://www.health.gov/healthypeople/document.

IV. Centers for Disease Control

No response

Department of Agriculture

No Response.

Department of Housing And Urban Development

I. Public & Indian Housing/Office of Native American Programs (ONAP)

No response.

II. Office of Universities Partnerships

Work with stakeholders to devise a workable rural broadband strategy rather than imposing a strategy upon them.

III. Office of Rural Housing and Economic Development

We should engage national and local entities that focus on addressing the needs of America's rural communities to support the broadband strategy. Some of these entities include: Housing Assistance Council (HAC), LaRaza, LISC, Enterprise Foundation, Habitat for Humanity, Delta Regional Authority (DRA), Appalachian Regional Commission (ARC), National Association of Development Organizations (NADO), Low Income Housing Coalition, and Rural Community Assistance Corporation (RCAC).

Small Business Administration/Office of Advocacy

No response.

Department of Education

Office of Special Education and Rehabilitative Services

I. Office of Special Education Programs (OSEP)

No response.

II. Rehabilitation Services Administration (RSA)

No response.

III. National Institute on Disability and Rehabilitation Research (NIDRR)

- Implementation of a National initiative to ensure that all new broadband projects include accessibility for people with disabilities and those who are older.

- Implementation of a National initiative to build an open source accessibility infrastructure to support accessibility for people of all socioeconomic levels across the nation.

- Essential to the success of telerehabilitation is assurance that rural areas have full access to broadband connectivity. The rationale for the development of telemedicine and telerehabilitation has largely been based upon the need to extend traditional health care services, and in particular specialized services to those rural areas that do not have the local resources to meet the population's health care and rehabilitation needs. As the development of the remote medical and rehabilitation technology identifies broadband Internet connectivity as the essential infrastructure, there is a resulting clear need to assure that individuals and health care providers in rural areas have reliable broadband access.

- Many federal dollars have been spent in the past (USDA, e.g.) to build infrastructure in rural settings; in some instances these have resulted in grants given to install cable or fiber, but no ultimate service resulted, possibly because the grants either didn't cover that part, or didn't check to see that was done. It would be useful to identify such "electronic bridges to nowhere." One relatively low-cost approach would be to facilitate small businesses to tap into the installed base permitting them to redistribute to those in their communities.

DoEd. Office of Elementary and Secondary Education

- Communication and Awareness are essential to broadband rollout.
- Wide-scale dissemination of information, publications and products to rural communities.
- Work in collaboration and form partnerships with Rural Associations and organizations.

Department of the Interior

Given that the rural broadband program parameters and their associated workload are not now known, it may be necessary for the Department of the Interior to establish, within the DOI/OCIO/EID, a rural broadband development coordinator position to serve as the focal point for coordinating these efforts as well as leveraging the DOI's broadband access capabilities to support the National program. Innovative financing mechanisms, similar to the Universal Service Fund that could be used by Federal agencies to meet their rural broadband program responsibilities would likely improve the efficiency with which broadband service is deployed to rural areas.

Department of Commerce

I. EDA

No response.

II. NTIA

No response.

Appalachian Regional Commission

ARC mission is for the Appalachian Region to be on the same economic footing as the rest of the nation. We see broadband as an opportunity to provide the ability for our region to compete for jobs and services nationally and globally. For this to happen, it is very important that a rural broadband strategy include broadband availability throughout all rural areas – and at speeds that are not substantially slower than urban areas and at prices that are affordable.

Delta Regional Authority

With its broadband initiatives and programs and its ability to serve one of the most rural, impoverished regions in the country, the DRA should be included in the nation's rural broadband strategy.

Institute of Museum and Library Services

Future budget and policy decisions regarding the deployment of broadband should consider not only household penetration rates, but also the role that libraries can play in addressing broadband priorities at the state and local levels.

The technology available in today's public libraries can help reduce the broadband access gap for families, while providing a wide range of information resources and services. Overall, the percentage of public libraries that provide free broadband Internet to patrons increased from 49% in 2002 to 65% in 2007, the most recent year available. In 2007, the percentage of libraries providing broadband Internet access in urban, suburban and rural areas was 91, 70 and 52%, respectively.

Information technologies available in the majority of public libraries represent a vital community resource, combining technology access with high quality content to meet the needs of patrons in the digital age. Today's librarians leverage an ever-widening range of resources to help patrons access health information, apply for jobs, find financial and government information and much

more. Improvements in library technology services over the past ten years suggest that public libraries are well positioned to play a greater role in providing access points to broadband services for people in both urban and rural areas and to families in need

See http://www.imls.gov/pdf/DataNote2009_01.pdf

National Council on Disability

- Include IT knowledgeable people with disabilities in any interagency working group.
- Promote the same in rural community planning groups, task forces, etc. by requiring such in any grant programs.
- Ensure that any grant programs for rural communities require certification of compliance by recipients with applicable federal civil rights and telecommunications laws.